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Abstract

Thirty-six participants and four observers representing 34 states attended the practicum at the Utah State University campus in Logan, July 8-19, 1968. The purpose was to provide high school business teachers with practical knowledge, experience, and materials for designing and operating simulated business offices in their classrooms. The practicum allowed time for participants to plan programs to be used in their home schools. One section of the report develops the following topics in relating to simulation: (1) present role, (2) purpose and background, (3) design, (4) objectives, (5) physical facility, (6) evaluation, (7) debriefings, (8) phases, (9) development, and (10) future role. The appendix presents the following papers: (1) "Simulation Principles" by Garth A. Hanson, (2) "Simulation for Poverty Area Training Programs" by Chuck Bustya, (3) "Dynamics of Education for Office Occupations" by Bruce I. Blackstone, and (4) "Educational Technology" by Harry Silberman. Some materials utilized in the simulation process are also included. (JK)

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PRACTICUM FOR SIMULATED METHODS IN OFFICE OCCUPATION EDUCATION

Department of Business Education
and Office Administration
Utah State University, Logan Utah

June, 1969

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

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Garth A. Hanson

Utah State University

Logan, Utah

1969

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PREFACE

The Practicum for Simulated Methods in Office Occupations Education was held on the Utah State University campus at Logan, Utah between July 8 through July 19, 1968. The Practicum was attended by 36 participants and 4 observers representing 34 states. The Practicum was conducted for practicing high school business teachers who met the following requirements:

1. Plan to teach simulation in business classes during the next school year.
2. Had not conducted a federally funded simulation program in their own schools during the past year.
3. Have the ability and opportunity to present simulation material to local state teachers after the Practicum.
4. Have had previous office experience.
5. Have the recommendation of the State Specialist of Office Occupations or other corresponding state official.

The qualifications were met as well as possible and the participants came ready to work.

The Practicum in its entirety was a result of a tremendous team effort by all concerned. It could not have been possible without the fine participants who attended, Utah State University who made the facilities available, the department of Business Education and Office Administration at Utah State under the capable leadership of Dr. Theodore Ivarie who gave unending support, and a very capable Practicum staff who spent many 16-hour days putting the program together. The cooperation of the U. S. Office of Education has been most appreciated because without their funding of this Practicum, it never would have happened. The success of the Practicum can only be measured in the eventual success of simulation by those who receive information for their programs from Practicum participants.

A special thanks must go to E. Charles Parker who has been very instrumental in the operation of the Practicum from the beginning up through the writing of this report. He helped with the on-site visits, gathering evaluation data, and has been very valuable throughout this project.

It is sincerely hoped that the information gathered during the Practicum efforts can be of great value to business teachers throughout the nation. It has been a very enjoyable experience right from the beginning and the results have far exceeded the hopes and expectations of all those connected with the Practicum.

Garth A. Hanson
Practicum Director

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SUMMARY

The Practicum for Simulated Methods in Office Occupations Education was conducted on the Utah State University campus in Logan, Utah between the dates of July 8 and July 19, 1968. The purpose and objectives of the Practicum were to provide teachers with practical knowledge, experience, and materials necessary to design and operate simulated business offices in their classrooms.

Each participant received as a result of this Practicum: (1) an overview of simulation and how this teaching method relates to teaching situations; (2) an awareness of the total office education program in the secondary schools as it now exists; and (3) an introduction to the types of evaluation a teacher could employ in the simulation process in his own classroom teaching situation.

The procedures of the Practicum were developed to afford each participant the maximum amount of time to spend on his own program to be used in his home school. Instructions were given and the participants used these instructions in his own planning. Emphasis was placed on simulation development techniques so that each participant would be qualified to disseminate information in his own state.

At the conclusion of the Practicum, each participant continued working with their simulation material and integrated it into their individual classrooms. The evaluation has shown that the efforts were well rewarded and the Practicum information has been disseminated and used in many schools throughout the nation. Participants were allowed to make presentations to interested groups in most of the states and some states used these participants in the development of simulation information for use in guides and workbooks.

It is expected that this Practicum was one of the first of its kind and developed a training procedure plan for pre-service teachers who will be using the simulation technique in teaching. Practicum participants were instructed to disseminate simulation information to teachers and schools interested in this procedure of teaching. It is expected that through the simulation technique, a more realistic teaching method will be provided through simulation where students can conceptualize the office in its entirety.

Participants were selected through the assistance of local state officials in each state. The following requirements were established for participation in the Practicum. Participants were to:

1. be currently teaching business subjects in the secondary schools.

2. Plan to teach simulation in business classes during the next school year.

3. have not conducted a federally funded simulation program in their own schools during the past year.

4. have the ability and opportunity to present simulation material to local state teachers after the Practicum.

5. have had previous office experience.

6. have the recommendation of the State Specialist of Office Occupations or other corresponding state official.

The Practicum has met all of the objectives which were established in the beginning and information has been disseminated far and wide. It is enthusiastically recommended that further experiences of this kind be afforded secondary business teachers interested in simulation teaching.

CHAPTER I

INTRODUCTION

Many things can be learned from books, lecture, and from observing demonstrations. It is believed, however, that just as students can learn better by doing, teachers can learn better the art of simulation by being actively involved in a simulation.

This practicum was one of the first of its kind. It developed a training procedure for pre-service teachers who will be using the simulation technique in teaching. Practicum participants were instructed to use simulation in their schools as well as disseminate simulation information to teachers and schools interested in this process. It is hoped that through the practicum the simulation technique, a more realistic teaching method, will be provided where students can conceptualize the office in its totality.

Statement of the Problem

In order to meet the needs of students in preparing them for entry office jobs, business teachers are required to constantly look for improved methods of teaching.

The old cliche, "experience is the best teacher" holds true in training future office workers. Cooperative programs are meeting the needs in some schools through on-the-job experiences. These programs are supplemented by large amounts of teaching materials and examplary programs.

Simulating the office within the classroom seems to be another good method of giving "office experience." The purpose of creating simulated offices in high school classrooms is to make it possible to experience functions of the office which are difficult, if not impossible, to present in conventional office occupations courses. Such simulated offices can, of course, afford novel and interesting environments for the students and can provide a refreshing change of pace for the teachers.

In view of the previous statement, one can see that it is quite imperative that the teacher be experienced in office work, or at least have had the opportunity of seeing or taking part in a simulation.

There is a very short supply of teachers who know the techniques of simulation. This need can be related to at least five very obvious deficiencies:

1. There are few sources of simulation manuals available for classroom use.

2. There are few teachers who have observed a simulated office.
3. There is a lack of teachers with current office experience.
4. There are few simulated programs from which to model other programs.
5. There are very few teacher training institutions offering methods in teaching simulation.

This all points to a great need for practicums that will show business teachers how to establish simulation in their office occupation classrooms. As the first practicum in these series, this report and the material produced could be used as a model for future training sessions with office occupations teachers.

Objectives

More specifically, the purpose of this practicum was:

1. To present an overview of the field of simulation.
2. To provide teachers with practical knowledge, experience and materials necessary to design and operate simulated business offices in their classrooms.
3. To explore the development of an evaluation instrument for use by teachers in their simulation classrooms.
4. To present an overview of the total office occupations program in the secondary schools.
5. To evaluate the practicum.

Definition of Terms

The following terms are defined as they pertain to this practicum:

Mobile Office Education Unit, (MOE)

MOE is the name given to the mobile office education van developed by Utah State University and the Utah State Department of Vocational Education. It is used to provide a simulated office facility and an instructional package for selected schools in rural Utah. During the summer it is used for general business instruction for migrant farm workers.

Rich Man's Office

Rich man's office is the term given to the simulated office using modern, up-to-date equipment. This teaching facility furnished as near to an actual modern office as possible including typewriters, telephones, calculating equipment etc.

Poor Man's Office

Poor man's office is the term given to the simulated office using minimum equipment. This office would be equipped with little more than typewriter, tables, and a ten-key adding machine.

Practicum

A term which refers to a two-week seminar entitled "Practicum of Simulated Methods in Office Occupations Education," and held on Utah State University campus July 8-19, 1968.

Participant

An educator in the field of office occupations selected to attend the "Practicum of Simulated Methods in Office Occupations Education."

Office Occupations

Is a combination of courses and practical experiences organized into programs of instruction to provide opportunities to persons to prepare for and achieve career objectives in office occupations.

Simulation

A program in office occupations where an office, complete with environment, working papers, and an office situation, is established in a classroom for instructional purposes.

Cooperative Office Education

A coordinated program of instruction in office occupations where the student receives on-the-job work experience and classroom instruction combined to reach employment objectives in office occupations.

Directed Learning

A coordinated program involving the school offices and the business department. The student receives work experience at the school under close supervision of the business teacher-coordinator, and related learnings in the classroom, that leads to a career objective in office occupations.

CHAPTER II

METHODS OF PROCEDURE

The following methods were used in the development of the Practicum for Simulated Methods in Office Occupations Education.

Selection of Participants

A brochure was prepared and mailed to interested, qualified candidates through state, district, and local supervisors of office education. Plans were made to include advertising in business education periodicals, but such ads did not appear due to the late awarding of the grant.

All applications were sorted as to states and a list was sent to each state supervisor for recommendations. As the recommendations were received, selections were made by Practicum leaders. These selections were based very heavily upon these recommendations together with other information available, such as teaching background, business experience, dissemination potential, and personal data sheets. The importance of this process of selection cannot be over emphasized. The cooperation of state and local administrators is imperative if the participants are to receive maximum opportunity for dissemination of Practicum information. Thirty-six participants from 34 states were selected to attend. See Appendix A.

Directors of the Practicum were:

Mr. Garth A. Hanson	Assistant Professor and Teacher-Educator, Utah State University Logan, Utah; Director
Mr. E. Charles Parker	State Specialist for Office Occupations Education Salt Lake City, Utah; Associate Practicum Director
Mr. Charles Bustya	Systems Expert, Systems Development Cooperation Santa Monica, California; Associate Practicum Director

Other staff included:

Mrs. Marie Sanders	Business Teacher, Gunnison High School Gunnison, Utah; Instructor
Mr. Elroy Zentner	Business Teacher, Tooele High School Tooele, Utah; Instructor

In addition to the above staff members, the following persons were hired as consultants. Their title and the topics they discussed are included:

Dr. Bruce I. Blackstone	Program Planning Officer, Head, Office Occupations Education, Dept. Health, Education, Welfare U.S. Office of Education, Washington, D.C. "Dynamics of Education for Office Occupations"
Dr. John E. Binnion	Professor, Business Education Texas Technological College, Lubbock, Texas "A Review of Similar Conferences: Leadership and Cooperation; and the Case Method"
Dr. Harry Silberman	Manager, Education Systems Department Public Systems Division System Development Corporation Santa Monica, California "Educational Technology"
Dr. T. W. Ivarie	Chairman, Department of Business Education and Office Administration, Utah State University Logan, Utah "Educational Resources Information Center"
Mr. Edward A. Ferguson	Vice President, Utah Mortgage Loan Corporation Logan, Utah "How to Approach a Firm for Help in Developing Your Simulation Program"

Topical Outline of Practicum

Practicum Schedule

Monday, July 8, 1968

8:00 a.m. Welcome address, Introductions
Introduction of each simulation position
8:20 a.m. Simulation demonstration--MDTA participants and staff
Debriefing session
9:20 a.m. Break
10:00 a.m. Introduction of staff and participants
Presentation of theme, "Teach Reality"
Explanation of schedule
11:15 a.m. Lunch
Luncheon speakers--President Glen L. Taggart--USU President
"Growth of Education"
Dr. T. H. Bell--State Superintendent of Public Schools
"Future of Education with Simulation and other Innovations"
1:20 p.m. The entire group was divided into three equal groups to attend the following three presentations:

1. A field trip to the Mobile Office Education unit located at a migrant farm camp. Participants received instruction in simulation development and a history of the MOE unit. Garth A. Hanson and E. Charles Parker

2. A presentation of the poor man simulation. An explanation of how to set up simulation with very little equipment and poor facilities. Marie Sanders and Elroy Zentner

3. Each participant received positional instructions for a regular simulation in a rich man's office, or an office that is fully equipped. Chuck Bustya

4:30 p.m.	End

Tuesday, July 9, 1968

8:00 a.m.	Participants rotated and attended three presentations listed above.
9:15 a.m.	Break
10:45 a.m.	Continue presentations.
11:30 a.m.	Lunch
1:30 p.m.	Participants rotated and attended three presentations listed above.
4:30 p.m.	End

Wednesday, July 10, 1968

8:00 a.m.	Simulation program development: planning and data collection
9:00 a.m.	Data collection experiences
9:30 a.m.	Break
10:00 a.m.	Simulation program development: requirements, design and preparation
11:00 a.m.	How to Approach a Firm for Help in Developing Your Simulation Program--Mr. Edward A. Ferguson, Vice President, Utah Mortgage Loan, Corporation
11:30 a.m.	Lunch
12:30 p.m.	Talk--Dr. John E. Binnion, "Leadership and Cooperation in Business Education"
2:00 p.m.	Work period--development of raw data into defined limits for practicum simulation
4:30 p.m.	End
5:30 p.m.	Steak barbecue

Thursday, July 11, 1968

8:00 a.m.	Work period--further development of raw data into usable material and choosing positions
9:45 a.m.	Break
10:15 a.m.	Continue work period
11:30 a.m.	Lunch
1:30 p.m.	Flow diagramming
2:30 p.m.	Work period--flow charting material
4:30 p.m.	End
7:30 p.m.	Talk--Dr. Bruce I. Blackstone, U.S. Office of Education "Dynamics of Education for Office Occupations"

Friday, July 12, 1968

8:00 a.m.	Work period--continue flow charting
9:45 a.m.	Break
10:15 a.m.	Work Period--flow charting and script development
11:30 a.m.	Lunch
1:30 p.m.	Work period
4:30 p.m.	End

Monday, July 15, 1968

8:00 a.m.	Work period--script development
8:45 a.m.	Passed out the procedures manuals for the individual positions in MOE and the forms used with the package
9:00 a.m.	Work period--developing procedures manuals
9:45 a.m.	Break
10:15 a.m.	Talk--Dr. T. W. Ivarie, Head, Department of Business Education and Office Administration, USU "Educational Resources Information Center"
10:45 a.m.	The use of simulation for poverty area teaching programs
11:30 a.m.	Lunch
2:00 p.m.	Continue work period--developing procedure manuals for each position
4:30 p.m.	End

Tuesday, July 16, 1968

8:00 a.m.	Work period--procedures manuals and script writing
9:45 a.m.	Break
10:15 a.m.	Continue work period
11:30 a.m.	Lunch
1:30 p.m.	Contingency Tables and Scripting--E. Charles Parker
2:00 p.m.	Work period--developing contingencies
4:30 p.m.	End
5:30 p.m.	Barbecue

Wednesday, July 17, 1968

8:00 a.m.	Work period--contingency development
9:00 a.m.	Simulation demonstration--Practicum staff and participants
9:45 a.m.	Break
10:15 a.m.	Work period--preparation for debriefing session
11:30 a.m.	Lunch
1:30 p.m.	Continue work period--preparation for debriefing session
4:30 p.m.	End
7:00 p.m.	Talk--Dr. Harry Silberman, Manager, Educational Systems Department, System Development Corp., Santa Monica, California "Educational Technology"

Thursday, July 18, 1968

8:00 a.m.	Debriefing
9:00 a.m.	Simulation program development: evaluation
10:15 a.m.	Break
10:45 a.m.	Debugging session--small groups of participants and staff set simulation up in model office, run through simulation to determine weak points.
11:30 a.m.	Lunch
1:30 p.m.	Debugging session
3:30 p.m.	Innovations--participants described innovations programs in office occupations in which they participate.
4:30 p.m.	End

Friday, July 19, 1968

8:00 a.m.	Participants filled out information forms
8:30 a.m.	"So You Wanna Be A Secretary"--Garth A. Hanson
9:00 a.m.	"Your Ethics Are Showing"--Garth A. Hanson
9:30 a.m.	Break
10:15 a.m.	Wind-up speech--Garth A. Hanson
11:00 a.m.	Presentation of Certificates--Dr. Stanford Cazier, Assistant to the President, Utah State University

CHAPTER III

FINDINGS AND ANALYSIS

A. Present Role of Simulation

There are two basic purposes of Vocational Office Occupations programs. (1) To provide each student with office skills sufficient to obtain employment, and (2) To provide each student with sufficient office skills to allow him to stay on that job as long as desired. Simulation fits into office occupations as a means to meet these two objectives.

Simulation is not the only effective means of achieving vocational goals. A student learns valuable basic information in the early years of formal education. At some point, he decides that he has an interest in Office Occupations. The next step is enrollment in business classes. A skill is developed initially and other skills are added until there is a trained service to "sell" to an office employer. As this office service emerges, there is a time when each student must tie many office procedures together. There are many programs used by business educators throughout the country to tie these procedures into a salable package. Simulation is just one of these and it compares favorably with such methods as Cooperative Office Education, directed learning procedures, and conventional teaching methods.

A good Cooperative Office Education program is one of the most effective methods now in use. Simulated office education can be just as effective in most cases and will be more effective in places where good work stations do not exist. A teacher can show the student how an office functions and maintain complete control of that office at all times. The procedures can be analyzed, changed, and rerun for effectiveness. The student can make mistakes, learn correct procedures and run through the procedure again eliminating the errors. The simulated office is not governed by the profit motive. The motive is purely and simply a better office employee for Mr. Employer.

B. Purpose and Background of Simulation

Parallel to the development of a simulation package for the Practicum, the State of Utah was developing a simulation package for a mobile office laboratory called Mobile Office Education, or MOE. This mobile unit is now being used to train migrant farm workers as well as students in small rural high schools through simulation. The simulation package used is called MOE, INC., and represents a distinct company.

The MOE, INC., package is still in the testing and refinement stages, but is the most highly developed package available. For this reason, the MOE, INC., package was partially used in the Practicum and will be used as a basis for discussing simulation development techniques in this final report. Because the MOE package was not developed through Practicum funds, it is not included in its entirety as a part of this report.

Simulation is not a new concept in education. It has been around for many years. You very likely used it as a child when you were growing up. You assumed the role of one of your parents, the nurse, or a fire chief. Simulation is a very real part of our learning process.

Webster says that simulation is "to assume the appearance of . . ." With MOE, INC., we are assuming the appearance of an office; and in order to succeed, we must get realistic reactions from the participants. It takes a lot of preparation to get this kind of response. Imagine the background and effort that goes into a space shot simulation, a national emergency simulation, or an office simulation.

Our purpose in simulating an office is to get the participant office workers used to working in an office. You are a part of a real office; only the outside environment is simulated. You could actually conduct business for a mortgage loan company within these walls. The only time you will become anything other than an office worker is when you become the Administrative Assistant; you are then the outside world. You may simulate a telephone operator, a customer, or a banker down the street.

The MOE, INC., simulation was copied from an actual mortgage loan office, Utah Mortgage Loan Corporation of Logan, Utah. Four simulation experts entered the offices of U.M.L.C., and interviewed each worker at his work station. These workers were asked questions about their positions and relationships to the overall operation of the office. The simulation team collected procedures and problems which occurred within the office in the form of letters, phone calls, forms, etc. From this information, a simulation was developed for use in office occupations programs in the State of Utah.

C. Simulation Design

1. Prerequisites

There are only two basic prerequisites for simulation. (1) All students who enter the program must have had some formal typewriting instruction. It is possible that a student could succeed in the program with only one semester of typewriting but at least one year is preferred. (2) The second prerequisite is that the curriculum must provide at least a two-period block of time, back to back without interruption. The simulation takes enough time to set up and take down that very little could be accomplished in less time than that.

Some instruction in shorthand would also be desirable for some students. If the student has not had shorthand, it is possible for him to complete all positions in the office by using dictating equipment. Shorthand would make the student more valuable to the world of work and should be encouraged however. Other business courses in machines, bookkeeping, and general office procedures would be helpful if taught prior to this course, but all office skills can be taught during the course of simulation.

2. Implementation

Simulation can be taught in many ways. You are encouraged to use it as it best fits your program. Here are three plans which may help you get an idea as to how simulation could be used in your classroom.

Plan 1 semester - 18 weeks

1 week	orientation
2 weeks	simulation using Phases I and II
3 weeks	classroom orientation discussing specific problems that have arisen, skill development, and preparation for Phase III
2 weeks	using simulation Phase III
4 weeks	classroom discussion concerning specific problems that have arisen in Phase II, skill development, and preparation for Phase IV
4 weeks	simulation using Phase IV
2 weeks	debriefing and final evaluation

Plan 2 school year - 36 weeks

6 weeks	classroom as usual studying related office situation units
2 weeks	simulation using Phases I and II
6 weeks	classroom as usual picking up additional office units
2 weeks	simulation using Phase III
8 weeks	classroom as usual
4 weeks	simulation using Phase IV
8 weeks	classroom as usual tying together the entire years activities

Plan 3 school year - 36 weeks

27 weeks	classroom as usual studying related office situation units
8 weeks	simulation using all four phases in succession
1 week	classroom as usual tying together all activities

3. Positions

The MOE, INC., simulation contains 7 student positions. These positions have been selected to meet the needs of the simulation as well as the students. The positions are listed in alphabetical order in an attempt to emphasize that no position is any better than any other position. All positions are different in their operation and all students are encouraged to experience each position in order to obtain training in all office situations.

ADMINISTRATIVE ASSISTANT

Takes the place of the outside world in the simulation. Duties consist of being an assistant to the teacher, role playing (County Tax Assessor, Bank, Insurance Company, Mailman, Customers), telephoning, evaluating, initiating customer contact, and anything else directed by the teacher.

CASHIER

Receives and deposits customer payments, manages petty cash fund, posts to investors' ledgers, completes daily summary and recap, writes welcome letters to new customers, completes payment fact sheets, and handles all bad check procedures.

EXECUTIVE SECRETARY

Regulates work overflow, handles dictation and transcription duties, is Girl Friday for VICE PRESIDENT, and is responsible only to the VICE PRESIDENT.

INSURANCE CLERK

Checks insurance policies for completeness and accuracy, completes correction forms on incorrect policies, writes premium letters to customers with correct policy and completes tickler card on correct policy, handles policy cancellation notices, and renews insurance policy using customers' reserve or requests additional funds from borrower so he can pay insurance premium.

POSTING AND TAX CLERK

Requests individual property tax amounts from County Assessors, pays taxes from individual customers' reserves, requests additional funds to pay taxes, and posts to customers' ledgers.

RECEPTIONIST

Makes initial contact with visitors, understands total office concept, files all correspondence, may conduct tours, screens visitors, and fills in wherever needed in the office.

VICE PRESIDENT

Acts as office leader and has direct charge of and is responsible for upgrading the office, is responsible only to the President, must supervise personnel, makes personnel evaluations, writes and dictates letters, completes payroll, and interviews prospective employees.

4. Rotation Plans

If simulation could be established under "perfect" conditions, it would be suggested that the classroom would be set up for 7, 12, 18, 24, or 30 students. This would provide 1, 2, 3, 4 or 5 complete offices with each position filled at all times. Since this is highly improbable in all high schools, the following chart has been developed to help you in placing students. If you have 22 students, you could establish three complete offices (18 students) and place the remaining 4 students in the skeleton of the fourth office. Make certain that the same four students are not left in the skeleton office constantly.

You will also find that it is possible for some positions to function for more than one office. As you become familiar with the simulation, you can make adjustments which will solve many of these problems.

a. Rotation Plan

Offices are kept small--simulation is recommended for no less than 7 students.

No. of Students	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Vice President	1	1	2	2	2	2	2	3	3	3	3	3	3	4	4	4	4	4	4	5	5	5	5	5
Executive Secretary	1	2	2	2	2	2	3	3	3	3	3	3	4	4	4	4	4	4	5	5	5	5	5	5
Cashier	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	4	5	5	5	5
Posting & Tax Clerk	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	4	5	5	5
Insurance Clerk	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	4	5	5
Receptionist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
Administrative Asst.	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3

One Receptionist can take care of up to 23 students.
One Administrative Assistant can take care of up to 14 students.
Two Administrative Assistants can take care of up to 29 students.

A simplified rotation schedule for seven students (one office)

Student	Rotation 1	Rotation 2	Rotation 3	Rotation 4	Rotation 5	Rotation 6
A	VP	ES	Ca	P-T	IC	AA/Re
B	AA/Re	VP	ES	Ca	P-T	IC
C	IC	AA/Re	VP	ES	Ca	P-T
D	P-T	IC	AA/Re	VP	ES	Ca
E	Ca	P-T	IC	AA/Re	VP	ES
F	ES	Ca	P-T	IC	AA/Re	VP

Key to abbreviations:

VP - Vice President	P-T - Posting & Tax Clerk
ES - Executive Secretary	Re - Receptionist
AA - Administrative Asst.	
Ca - Cashier	
IC - Insurance Clerk	

D. Objectives of Simulation

Simulation, like all vocational office programs, has two major objectives. (1) To provide basic office skills which will permit students to obtain jobs in offices, and (2) to provide sufficient proficiency so that they will be able to retain those jobs once they get them.

Simulation is designed so as to provide real office situations under simulated conditions. Once the student has obtained basic skills, simulation provides the student an opportunity to practice those skills under office conditions—the teacher acting as a supervisor to aid in the learning process. Simulation will provide a chance for each student to gain his first office experience in an office but off the job. This will make the entry into office life a much easier adjustment.

During the simulation, the following class objectives will be met as they relate to specific subjects:

Typewriting	Correspondence (letters and memoranda), forms, rough draft work, and composing at the machine.
Shorthand	Office style dictation and mailable transcripts.
Recordkeeping	Posting to ledgers, bank deposits, petty cash funds, making change, percentages and balancing ledgers.
Machine Dictation and Transcription	Office style dictation and machine operation.
Machine Operation	Adding machines, calculators, bookkeeping machines, tape recorders, duplicating machines, and dictating equipment.
Duplicating	Master preparation and machine operation.
Filing	Alphabetic, numeric, subject, geographic, tickler files and information retrieval.
Telephone	Office operation procedures.
Office Supervision	Work distribution, discipline, office procedures and evaluation.

E. Physical Facility

Each classroom is different and must be set up so that the classroom can be used for regular classes as well as the simulation with as little change as possible. Each of the phases are different with learning objectives in mind. Arrange your classroom to meet yourneeds.

Phase I	Classroom can be in any arrangement. There must be a place provided for a private interview with each student, it could be another room or an office.
Phase II	All positions should be together, such as Vice President, Executive Secretaries, Posting and Tax Clerks, and Insurance Clerks. They will help each other. The Receptionist should be placed so as to welcome all visitors. The Administrative Assistant should be placed close to the teacher and contingency files. Use portable partitions to separate groups or offices.
Phase III and IV	Place offices together instead of positions together. Receptionists should be placed so as to welcome all visitors. The Administrative Assistant(s) should be close to the teacher and contingency files. Vice President should be placed so as to lend prestige to his position. Executive Secretary should be placed so as to be readily accessible by the Vice President. The Cashier should be placed so as to be available to incoming customers. The Posting and Tax Clerks and Insurance Clerks should be placed near their machines. All clerks in the program could be placed in a "pool" near their equipment.

F. Materials Needed

One Student Manual for each student.
One Teacher's Manual for each classroom.

Equipment Needed

1. Essential

    1 typewriter for each student (electric preferred)
    1 adding machine for each 6 students
    1 duplicating machine
    1 filing cabinet
    portable partitions to separate offices
    2 rotary files

2. Very high priority

    intercom telephone system (3 phones for every 4 students)
    1 dictating-transcribing machine for every 6 students
    1 proportional spacing typewriter for each 6 students
    1 printing calculator for each 6 students
    office style desks, file cabinets, and chairs
    accoustical floor coverings

3. Important to have

    electric typewriter for each student
      (Proportional spacing machines for Executive Secretary)
    intercom telephone system with a phone on each desk

1 printing calculator, 1 rotary calculator, and 1 ten-key adding machine for each 6 students
1 dictating machine AND 1 transcribing machine for each 6 students
office style furniture throughout including carpets
dry photo-copy equipment
spirit duplicator
steno lab
posting machine
addressing machine

G. Evaluation

One of the major considerations of simulation is evaluation. You are to control the simulation so that you know what is going on at all times. It is important that you give a grade that indicates the employability and office potential of that student. There are several suggestions that will be made at this time for evaluation purposes. Please watch these procedures very carefully as this is a very important part of the simulation process.

1. Student evaluation--each position during each phase

The last day of each rotation, the Vice President is asked to complete an evaluation form for each student under his supervision. This form, beginning with Phase II should be handed to you, the teacher, and held in very strict confidence. The student should know that he can evaluate his peers and not have any of the information, good or bad, get back to that peer. File the evaluation sheets according to each student so that at the end of the simulation, each student will have 15 evaluations in the teacher's file. Each sheet has been signed by each Vice President. If there is any question, be sure to talk it over with that Vice President as early as possible.

2. Teacher evaluation--each position

As you move throughout the office each day, you should give each student a subjective grade. This is an opinion grade which can consist of how well each student works, how much help he needs, how relative his questions are, how well he is dressed for the office, what his attitude is when working with other office workers, etc. You may want to limit this kind of grading to just once each rotation for each student.

3. Student work--each day

During Phases III and IV, copies of all work are to be made and placed in the "out" basket by each office worker. The Receptionist is to pick this material up and place it in the teacher's "in" basket. The teacher then processes and places it in the Vice President's "in" basket. The Vice President then approves or disapproves. At the end of the simulation you should be able to go to each student's file and take a look at the material produced. After the material once gets in the folder, the individual student is responsible to see that the material is neatly placed and in order. You should be able to determine how much work has been done and how well each student finished the work.

4. Rush jobs--periodically as needed

Especially during Phase IV and perhaps during Phase III, students sitting at the Cashier and Executive Secretary positions will be subjected to a timed production experience. At a given time, the teacher hands this rush job to the Administrative Assistant and requests that it be handed to the student. The student is to clear his desk as rapidly as possible and then report to the Administrative Assistant when he is ready; maximum time to clear the desk is approximately 5 minutes. The student then begins the rush job which consists mostly of letter typing for the Executive Secretary and bank deposits and letter typing for the Cashier. He is given 30 minutes to complete the job. During the job, he will be interrupted by telephone and customer business. This is to be controlled so as to determine how fast he is able to return to his work. If he finishes before the time is up, he is to personally return the work to the teacher or the Administrative Assistant. These rush jobs do for the simulation that timed writings do for the typewriting classroom and should be treated as such.

5. Recordings--as needed

If you have a telephone system, there should be a facility which can be used for recording conversations. Periodically there should be an evaluation for each student concerning his telephone techniques. This could be in class discussion or individually.

If you have access to video recording equipment, it is advised that you record a student at her station for a 5-to 10-minute period of time. You should then critique it personally and then call the student in and show her how she appears while she works. A little time with this procedure is one of the most valuable teaching aids available.

H. Debriefings

An interesting twist to simulation is the debriefing session. The idea came from the military as they use this process to determine how well an operation went or why breakdowns occurred. There are several rules one must follow in debriefing. Some are listed below:

1. Call the entire group to be debriefed together. Sit so they can see one another.

2. Start by asking a general question like "how did things go today?"

3. Do not suggest answers even if there are long periods of silence. The participants must do the thinking and the talking.

4. Keep the group on the subject. Adjourn the debriefing rather than let it degenerate into a chatter session.

5. Do not let the group blame other people for weaknesses in the procedure. You want to discuss these weaknesses but not by blaming anyone for them.

6. Keep records of each debriefing. There are many changes you may want to incorporate after one of these sessions. Have one of the Executive Secretaries take the minutes.

7. Encourage the participants to interact with each other. The idea is to let them correct themselves.

8. Allow sufficient time for the debriefing so that you do not have to stop just as the ideas are beginning to come out.

9. End on a pleasant note. It is not bad for the participants to become upset with one another but try to smooth the rough spots out before you adjourn.

These debriefings should occur as frequently as you think they are needed. There should be at least one for each session and possibly one for each rotation. One should definitely be held for the entire period at the end of the simulation.

The recording equipment previously discussed can be of real value in individual and group debriefing sessions.

I. Phases of Simulation

1. Phase I--Pre-Problem Briefing

Duration: 2 days

Day 1--Introduce the simulation

a. Describe the facility as you have arranged it.
b. List the positions on the board and describe briefly what they do.
c. Lay out general ground rules. Have the students help in these as they relate of office procedures and discipline. Discuss such things as:

    1. Who to notify in case of absence
    2. Dress standards
    3. Breaks (how many, when, and how long)
    4. Chain of command for communication purposes
    5. Other ground rules peculiar to individual situations
    6. Debriefing techniques

d. Introduce the students into the simulation office. Leave the last 15 minutes of class time free to investigate and try out facilities.

Day 2--Interviews

Each student must be interviewed for employment. Allow 30 minutes of class time for discussion of interviews.

As the interviewer talks with each applicant, he should keep notes for later discussion. The entire class should meet as a group. Have the interviewer give each applicant a number, not in sequence. He should review the applications and data sheets prior to coming to this class. He should then proceed somewhat as follows:

"It was interesting to interview each of you during the past day or two. I am pleased with your qualifications but there are some things I think you should know about my impressions of you and your employability in my office. I interviewed you with the intent of actually hiring you. While it is true that I do not have openings in my office for all of you today, it is conceivable that you may come to me sometime in the future looking for work."

He then discusses his likes and dislikes concerning each of the interviewees.

At the end of the discussion period, announce that the office will begin the next day. Assignments should be made so that each student can report for work, prepared to function as an office worker.

2. Phase II--Positional Instructions

Duration: 6 days

This phase is a general orientation phase involving a rotation of one day at each position. The purpose is to give a general overview of the company and to identify general student weaknesses which must be corrected in the regular classroom before Phase III can begin. Each student should be individually debriefed by the teacher to ensure a thorough knowledge and understanding of the elements of each position.

3. Phase III--Simulation Warm-up

Duration: 12 days

This phase is a more intensive treatment of each position and involves a rotation of two days at each position. Additional work is added to that given in Phase II and standards are progressively raised as the students begin to understand the concepts and procedures. Group debriefings become common as problems are identified. Student problems and weaknesses are again identified so that supporting classwork can correct them.

4. Phase IV--Full-Scale Simulation

Duration: 18 days

This phase is the full-scale simulation. The teacher participates in and/or interfers with the process as little as possible. The Vice Presidents have control and should exercise that authority. The quality and quantity of the work becomes greater as standards are progressively and systematically raised and as students' skills increase. The workers should be able to handle any situation that arises with minimum confusion and maximum efficiency.

J. Simulation Development

There are nine steps in the development of a simulation package which are very vital to a successful simulation. Even though there is much effort and time involved in developing this program, the effort is rewarded when these steps are followed.

1. Step 1. Simulation Must Simulate Something - A program is only as good as its contents. In order for simulation to produce the best results, it must simulate a true office in action. An office should be selected which represents the type of work you desire your students to do. After you have investigated the office, interviewers should obtain permission and interview each clerical employee (or one in each function). The information should be collected systematically and as sequential as possible. Record the kind of work done at each station, the destination of that work, the procedures involved, and the equipment used to complete the work.

2. Step 2. Define the Limits - Once the information has been collected, it must be adapted to the classroom situation. It is not the purpose of the simulator to copy all procedures in the office--just those which meet the objectives the teacher sets for the office occupations student. The teacher must decide what is to be accomplished through the use of the simulation. After these objectives have been set, the limitations must be recognized. These limitations include the amount of time to be used for simulation each day, the number of weeks in the year to be used for simulation, the classroom facility, and the size of the classroom office with its relationship to the normal classroom.

3. Step 3. Select Student Stations - After the instructional objectives have been established and the limits have been defined, work stations in the simulation must be established. These stations should function so that each student can meet the objectives set for him by the instructor. Examples of such positions are, in the case of a mortgage loan company, as follows:

Cashier:	Duties include telephone communications, bank deposits, mail processing, correspondence typing, and inter-office relationships.
Executive Secretary:	Duties include taking care of the Vice Presidents' needs such as transcription, telephone communications, correspondence, payroll procedures.
Insurance Clerk:	Duties include the use of tickler files, written correspondence, telephone, and ledger posting.
Posting and Tax Clerk:	Duties include posting to borrower and investor ledgers, paying taxes from borrower tax reserve accounts, telephone communications, and inter-office relationships.

Receptionist: Duties include answering and transferring telephone calls, mail processing, filing, and duplicating.

Vice President: Duties include dictation, work load adjustment in case of absences, payroll management, telephone communications, and other leadership responsibilities as they are needed.

Administrative Assistant: Duties include non-office functions. This student station is designed to aid the teacher in the input of information to the office to keep the office running to meet the educational objectives. This student uses the telephone for incoming calls, writes correspondence in answer to letters from the office and, in general, represents the outside world.

4. Step 4. Define Basic Routines - Each position has been identified and objectives established so students will have specified experiences at the end of the simulation. The basic routines must be defined for each position so that a certain amount of routine can be established for each position. The basic routines should be flow-diagrammed so they can be related to other positions in the office.

5. Step 5. Prepare Job Description Manuals - Job description manuals serve the same function in the simulation as they do in the real office. They contain a complete operational procedure for each function performed in the office. The students are encouraged to use them as much as possible when they have procedural questions. Each operation is explained in detail.

6. Step 6. Develop a Basic Script - As the students rotate through the office they will be performing basically the same procedures at each position. These tasks need to be outlined in the form of a script so the Administrative Assistant can initiate the input as it is needed. Variables are included by the teacher when the need arises in order to meet the students' individual needs.

7. Step 7. Add a Contingency List - Contingency has been defined as a possible or not unlikely event or condition. This list or file is developed so the teacher can place variable conditions into the simulated office. This file could consist of a series of telephone, dictation, payroll, and employee situations. This list actually becomes the resource file for the teacher to use in the operation of the office.

8. Step 8. Establish Evaluation Procedures - The objective of the simulated office is to help office occupations students meet selected objectives. A system must be established to see if these objectives have been met. This means grading procedures. Quality and quantity controls need to be established so each student knows how well he is doing. It is also essential that subjective evaluation be conducted as it relates to office actions, telephone conduct, and attitudes.

9. Step 9. Conduct Debriefings - The simulation should be designed as an educational tool. When a learning situation occurs, the simulation should be stopped and this situation discussed. This debriefing could be with one student and the teacher, or any other number of students, up to and including the entire class, when needed. This procedure has proven to be very beneficial and should be used regularly.

K. Future Role of Simulation

Simulation is not a new concept in education. It originated a long time ago. In office occupations education, simulation has been greatly aided by the vocational funds which were made available through the Vocational Act of 1963. With these funds, projects have been completed which have helped simulation as a teaching method.

It seems quite likely that simulation will grow rapidly in popularity throughout the country. The simulation method could best be used as a practice experience for students as they learn basic office skills. The office will provide the learning experience necessary for skill integration into the world of work.

The advantages of simulation over other teaching methods are many. (1) Simulation can be controlled at any time for educational purposes. The motive is education, not profit. Therefore, the teacher can do with it whatever he feels is educationally sound. (2) A good simulation is based on actual office procedures. The teacher must work closely with business in order to keep the simulation as closely related as possible. (3) The evaluation can be done under classroom conditions. The teacher sees the student in action and can evaluate in relationship with other factors involved with the student training. (4) A good simulation program can provide actual office experience under familiar conditions to the student. The student can dispel much of the first on-the-job jitters in the classroom. (5) Simulation experiences can be evaluated in the classroom much more effectively than can other types of office experience programs. Care must be taken to see that the evaluation is accurately done.

The future of simulation appears to be very promising. Simulation can be used profitably in conjunction with cooperative office education programs as well as with programs in schools unable to support cooperative programs. A mass teaching program must be undertaken to prepare business teachers in the procedures of simulation in order to meet the demand. A teaching package must also be developed for use in the "average" business classroom.

The simulated office education program is a very exciting method of teaching and is here to stay. A beginning of better simulation programs came with the awarding of this Practicum Grant by the U. S. Office of Education. Let us hope that more such programs will be made available for classroom teacher use.

CHAPTER IV

RESULTS

In order to evaluate in meaningful terms, one must divide the Practicum into three parts. These parts are (1) The Simulation Package Development, (2) The Two-Week Practicum, and (3) The Post Practicum Evaluation. The Practicum was successful in all three parts. Specific details are included below.

The Simulation Package Development

The primary objective of the Practicum was "to provide teachers with practical knowledge, experience, and materials necessary to design and operate simulated business offices in their classrooms." (Proposal) It was necessary to develop parts of a simulation package in order to meet this objective but it was impossible to develop a complete instructional package because of the lack of time and funds.

Each Practicum participant was provided with demonstrations and instructions needed to "design and operate" their own simulated offices. Time was then given during the Practicum for each participant to develop the basis of a program which would fit their own individual needs.

Instructions and demonstrations were given in how to produce programs with very little physical equipment and facilities (the poor man's office), with every possible piece of equipment and the very best of facilities (the rich man's office), and in a mobile classroom. Variables were explained so that each participant could use this knowledge in developing his own package.

Sample raw data were collected from two businesses in order to provide a variety of material for the participants. (See Appendix.) The two businesses were Utah Mortgage Loan Corporation, Logan, Utah and Sears-Roebuck and Company, Ogden and Logan, Utah. This material was duplicated for participant use but is not included in this report because of its bulk.

Individual Practicum participants then divided into sub-groups with others having similar conditions in their home schools. Much time was spent in individual package development but, due to the variety of needs of each participant, no common package, usable to all participants, was developed.

The participants spent many hours, during and after class, working with the simulation packages. Much was accomplished in a short time.

As the participants returned to their homes, they continued working with their packages and other simulation material. In every case, those who operated a simulation in their classroom during the past school year did so with a simulation package which was in the state of development. Even though this situation existed, they reported that this was the most exciting method of teaching they had ever used.

It is not the intent of this Practicum to draw together the participants who are simulating for the purpose of developing an instructional package for dissemination. If such a package is desired, it would certainly be within the realms of possibility--provided funds were made available.

The Practicum

During the Practicum, a complete overview of simulation was given to all participants. Procedures for conducting different kinds of simulations were outlined but the emphasis was placed on the procedures outlined in Chapter III. Participant interest was exceptionally high and all participants seemed to be there to learn simulation techniques. The participants were excellent and state and local officials can be thanked for this job well done.

The Practicum was evaluated as the two weeks came to a close and it was found that the participants were generally pleased with the Practicum. The time was well spent, the speakers performed their functions very well, and most importantly, the participants received much valuable instruction in methodology of simulation. The physical facilities for the Practicum were very adequate and close to the living quarters so participants could spend as much time as they liked working in the facility. Many voluntary overtime hours were spent by participants.

An overview of Vocational Office Occupations was given through the use of speakers brought in for this purpose. An attempt was made to correlate simulation as a teaching method together with other forms of office occupations education presently being used throughout the country. It was emphasized that simulation is not the only--nor the one best way--to teach office occupations, but it is a very good approach. The ideal would be to teach basic office skills in skills classes using the conventional one-period class currently being used in many schools. The next step would be to relate these skills to the office through the use of a simulated office program in the school. The final step would be to place the student on the job through the use of Cooperative Office Education. The amount of time spent in each of these programs would depend upon the individual circumstance.

Where parts of the plan were impossible to implement such as the cooperative education program, due to a small community or other factors which limit its use, simulation would provide most of the "experience" training. The directed learning program where students gain experience by working in offices of schools or in teachers' offices was also explained and related to the simulation program. This procedure could also be used in many varied ways in the office occupations program and included with simulation programs.

Practicum Evaluation

Questionnaire

Participants were asked to rank in the order of importance the level of supervisory personnel who could benefit most from a simulation practicum. It was interesting to note that the department head was the person most participants thought would benefit most from a similar practicum. The category "teachers" was omitted from the table because it was assumed that teachers benefitted the most from this practicum. This assumption was made on the basis of participant evaluations at the conclusion of the practicum.

RANK IN ORDER OF IMPORTANCE THE LEVEL OF SUPERVISORY PERSONNEL WHO COULD BENEFIT MOST FROM A SIMILAR PRACTICUM

Order of Rank	District Supervisor	State Supervisor	Principal	Vocational Counselor	Department Head
	Frequency of Response				
1	2	6	2	2	20
2	7	6	7	8	3
3	3	6	8	10	3
4	9	8	7	5	2
5	7	6	8	4	4

In response to the question, "Rank the following teaching methods in order of effectiveness in reaching office occupations objectives, in relation to your classroom experiences," simulation was selected as the most effective way of teaching office occupations.

RANK THE FOLLOWING TEACHING METHODS IN ORDER OF EFFECTIVENESS IN REACHING OFFICE OCCUPATIONS OBJECTIVES, IN RELATION TO YOUR CLASSROOM EXPERIENCES.

Order of Rank	Cooperative	Simulation	Directed	Office Practice	Intensified	1-hour Block	2-hour Block
	Frequency of Response						
1	7	13	3	1	1	0	8
2	7	7	1	9	3	1	3
3	8	5	5	7	3	0	5
4	1	2	5	7	7	4	5
5	4	2	4	3	6	4	5
6	3	1	4	2	5	8	4
7	0	0	4	1	1	14	2

A questionnaire was sent to all Practicum participants in April, 1969. See Appendix K. Of the 36 questionnaires mailed, all 36 (100%) were returned. The following is a list of questions asked, along with a tabulation of the responses:

	Yes	No	No Response
1. Are you currently using simulation in your district?	17	17	2
2. Will you be using simulation in your district next year?	21	9	6
3. Are you aware of any other schools in your state using simulation because of your practicum experience?	6	27	3
4. Do you think simulation is an effective teaching method?	34		2
5. Have vocational funds been made available to support simulation programs?	13	19	4
6. Did the practicum provide you with practical knowledge concerning simulation as a teaching technique?	36		
7. Did the practicum provide you with experience necessary to design a simulation for your own use?	32	1	3
8. Did the practicum provide you with materials necessary to design a simulation?	31	4	1
9. Should another practicum for simulation methods be sponsored by the U.S. Office of Education for practicing teachers?	32	3	1
10. Have your practicum presentations (group or individually) had a visible effect on office occupations programs in your state?	9	18	9

When asked about the reaction of the state office occupations leaders, the following responses were received:

HOW WOULD YOU DESCRIBE THE REACTION OF YOUR STATE OFFICE OCCUPATIONS LEADERS TO SIMULATION?

Reaction	Frequency
Enthusiastic	6
Very Interested	14
Passive	9
Not Interested	0
Opposed	0
Unaware	2
No Response	5

In order to evaluate the responses, question number 1 responses were multiplied by 7 (meaning that response was worth 7 points), question number 2 responses were multiplied by 6, question number 3 responses were multiplied by 5, etc., down to question number 7 multiplied by 1. With those weights, the following weights, the following results were obtained:

ADJUSTED TOTALS OF TEACHING METHODS CONCERNING EFFECTIVENESS IN REACHING OFFICE OCCUPATIONS OBJECTIVES

Teaching Methods	Adjusted Totals
Cooperative	153
Simulation	174
Directed	96
Office Practice	138
Intensified	97
One-Hour Block Classes	64
Two-Hour Block Classes	144

The participants felt that a traditional one-hour block of time was the least effective method in reaching office occupations objectives in relationship to their personal classroom experiences.

When asked, "How well does simulation fit into your present business curriculum?" the participants agreed (76 percent) that simulation would fit into their present business curriculum with varying degrees of effort.

HOW WELL DOES SIMULATION FIT INTO YOUR PRESENT BUSINESS CURRICULUM?

Reaction	Frequency	Percent of Responses
Extremely well	14	43
Satisfactorily	4	12
It does with effort	7	21
Poorly	1	3
Very difficult	5	15
Not at all	2	6

Of the 20 programs currently using some form of simulation as a teaching method in office occupations due to this Practicum, 707 students are being accommodated. One must remember that there were 16 participants, 44 percent of those attending, who were unable to conduct simulated offices in their classrooms due to various circumstances.

One of the Practicum objectives was to disseminate information to fellow educators in their states. It was estimated that simulation information was disseminated to 3,584 people in various walks of life in 31 states. See Appendix L. Of this amount, 2,765 were teachers. This Practicum was probably one of the most thoroughly disseminated experiences of its kind ever sponsored by the U. S. Office of Education for the number of participants in attendance.

Comments were also included in the returned questionnaire. A sample of these comments are included below.

"This has been the most exciting as well as the most effective year I have had. I know without a doubt that these students are better trained having had the simulation experience. The administration of our district is so completely sold on the program that a complete telephone system is being installed for another year. Through this program, I have been able to plant a seed of confidence within students who had very little self-esteem. Just being a part of the program gave a certain amount of prestige to the participants."

"The techniques and observations acquired from the Practicum have definitely influenced my lesson plans for teaching office practice this year. I have included in the course, projects aligned to actual office situations and have introduced some problems where the students need to interact with each other to complete their assignments. Students show much interest in their work and develop more businesslike routines when the classroom is converted into an office."

"I have found that the simulated clerical office practice class has been more meaningful in my profession. In this class, I have experienced the culmination of my teaching efforts. The students were more alert, enthusiastic and cooperative then ever before. Motivation of the students was evidenced by an improvement in their attitudes, cooperation with one another and me, and an improvement in absenteeism. They are now more conscious of the requirements of the business world."

"The Practicum has enabled me to gain a deeper insight into the deep, deep need for making office education as realistic as possible."

"I have a firm conviction that simulation is an excellent teaching method. Judging from the comments made by my students who have just graduated, I am sure that a simulation that would be as nearly real as possible is what they want and enjoyed most in my classroom."

"The Practicum presented another way of inviting teachers to get acquainted with the business community. Too many are satisfied to stay with the classroom but have no idea what changes are taking place in the community. If we as educators do not put forth some effort to improve our instructional program, make it more realistic, and provide them with a salable skill, industry will take over our job for us. Personally, it has provided me with the incentive that I need to continue to expand and improve our own program of instruction."

"I critically review the materials gathered at your Practicum for possible use in our situation. We are planning the quarter system for the coming year and hope to implement some of the methods and experiences gained from the excellent Practicum experience. More simulated techniques of teaching will be utilized during the coming school year. We feel that the materials gathered from these facilities will enable us to give the students more practical work in the classroom than has been experienced previously."

"It is frustrating to sit back and see traditional teaahing methods being used when I feel that the simulated method will better prepare our students to enter today's business office."

"I really don't think that I could have started a simulation class without the motivation and knowledge that I received at the Practicum lastsummer. I have been more than pleased with my first class in simulated office practice. It has been very successful. I feel that our students have gained more than they ever have before in a classroom environment. The students love it."

"I think the Practicum has given me a method of teaching office occupations which would be very effective as far as students are concerned, and would be very beneficial for seniors going into office positions. I believe it would give the students better training than cooperative office occupations because we could intensify English, math, personal attitudes, office etiquette, etc."

On-Site Visits

As the school year progressed, there were opportunities for Practicum leaders to visit several of the participants in their own environments and observe their programs in operation. These visits were made to 13 of the 36 participants with personal contact and information gathering discussions being conducted with 5 additional participants. The visits were made to the following:

California	Mrs. Lela M. Chaney	Hanford, California
Delaware	Miss Elinor Short	Newark, Delaware
Indiana	Mrs. Marjorie W. Baran	Gary, Indiana
Kentucky	Mrs. Bobbie Jean Karsner	Georgetown, Kentucky
Louisiana	Miss Neva J. Willis	New Orleans, Louisiana
Michigan	Mr. Gerald M. Brown	Lansing, Michigan

Missouri	Mrs. Virginia L. Barger	Neosho, Missouri
Nebraska	Mr. Charles D. Pickering	Syracuse, Nebraska
Nevada	Mrs. Lucy McCuskey	Fallon, Nevada
Pennsylvania	Miss Janice L. Reed	Lancaster, Pennsylvania
South Dakota	Mrs. Lorraine V. Cleven	Sioux Falls, South Dakota
Utah	Mrs. Faun M. Chidester	Kamas, Utah
Wisconsin	Mrs. Phyllis Heath	Milwaukee, Wisconsin

Personal contacts were made with the following participants at conventions or other professional meetings and practicum discussions were made with the objective of learning what they were doing with simulation as a direct result of the Practicum. Contacts were made with the following participants:

Idaho	Mrs. Virginia P. Price	Driggs, Idaho
Illinois	Mrs. Rose A. Davis	Wood River, Illinois
Montana	Miss Frances Neal	Billings, Montana
Vermont	Mr. Robert E. Houle	Bennington, Vermont
Washington	Mrs. Athyleen Nicholson	Tacoma, Washington

From these 18 contacts, it was learned that the Practicum had a very significant, far-reaching impact on vocational office occupations education throughout the entire nation. Most of these were actually operating a simulation program and were doing very well with it. Two major objectives were achieved through making these on-site visits. (1) Practicum leaders were able to see the total environment and program in operation as a result of the Practicum, and (2) participants were able to obtain information and help from Practicum personnel in the form of discussions, meetings with school authorities, and the exchange of ideas. Practicum leaders were treated especially well as they visited each of these facilities and participants; and in many cases, were met at airports, provided with transportation to and from airports, schools, motels, etc.

Other Evaluation

Besides the return of the questionnaire, contact has been maintained with all of the participants through written correspondence. Much has been learned and disseminated through the use of this information. In some cases, Practicum personnel were able to provide specific assistance; where in other cases, it was a matter of collecting and sharing ideas. It is hoped that this interaction can continue so maximum amount of information can pass among these participants in the future.

Participants were asked to get as much publicity as possible through local news media. Many of them were successful in obtaining newspaper and other media support. A sample of media articles is included in Appendix M. In every respect, the participants have responded far and above the average and have disseminated information whenever the opportunity appeared.

Some of the participants were successful in developing or assisting in the development of state guides, mailouts, and other forms of handbooks or manuals for general use by all teachers in the state. This process has some very definite implications for long-reaching dissemination. This kind of cooperation between state and local business education people and their Practicum representative will ensure, as much as is possible, the availability of Practicum information to all interested business teachers. It is also very rewarding to know that the states were able to send those participants who were leaders in their fields. Some of the states where this information is available are California, Washington, Illinois, and Kentucky. Other states have included their Practicum participant in state meetings and as simulation resource people in their state.

Educators desiring additional simulation information should contact their own Practicum participant. The participants are well-versed in simulation procedures and can provide much information. They will also be willing to speak or consult with interested groups.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

1. The secondary teacher was properly involved in the structure of the Practicum and was generally successful in disseminating the information as prescribed in the Practicum objectives.

2. The Simulation Practicum has had significant national impact.

3. Basic concepts of simulation are learned effectively through participant involvement in simulation development activities.

4. Future practicum participants should include secondary teachers, city supervisors, teacher trainers, and state specialists but not necessarily in the same practicum due to varied emphasis.

5. Secondary teachers must be highly motivated to spend time necessary to construct their own simulation package.

6. Secondary teachers benefit greatly through observation and participation in actual simulation activites.

7. The development of a complete simulation package requires many man hours not available on the Practicum schedule.

8. Practicum participants can benefit greatly from follow-up on-site visitation from Practicum staff in encouraging administrative support, evaluating on-going simulation programs, and providing help in initiating programs that have failed to materialize.

9. State support is essential in recognizing participant activities and in providing opportunities for practicum information dissemination.

10. Practicum participants are highly motivated through the use of realistic simulation facilities.

11. Good simulation can be as effective as other office occupations teaching procedures now in use.

12. Good simulation can successfully supplement cooperative programs.

13. Good simulation procedures can be effectively included in mobile units for use in rural and disadvantaged areas.

14. Good simulation can be an intrinsic part of office occupations education in the United States.

15. Practicum participants appreciate a wide variety of instructional approaches in the presentation of simulation information.

16. Simulation success is greatly affected by local administrative support.

17. State specialists were able to provide qualified participants.

Recommendations

It is recommended that:

1. Some similar practicums be conducted for secondary teachers, post-secondary teachers, teacher educators, city supervisors, and state specialists in preferrably separate practicums.

2. More lead time be given between the awarding of the Grant and the beginning of the practicum for better advertising, preparations, and participant selection.

3. A tested simulation package be used as a basis for future simulation practicums.

4. Qualified instructors and a variety of instructional methods be used in preparation and presentation of practicum information.

5. Because of the necessary involvement in simulation activities, the number of practicum participants be limited to not more than 30.

6. There must be a guarantee of administrative support for scheduling, equipment, and enrollment for simulation activities in represented schools in the school year immediately following the practicum.

7. Practicum budgeting should include funds for participant travel to state and professional meetings for the purpose of disseminating practicum information.

8. On-site visitation should be made by selected practicum staff personnel for the purpose of evaluating, assisting, and coordinating simulation programs developed by the participants.

9. A professional recorder and writer should be employed as a practicum staff member to facilitate the writing of a more effective final report.

10. Simulation programs be encouraged in all high school and post-high school institutions.

11. Teacher training institutions provide instruction in simulation techniques in preparing new business teachers.

12. Teacher training institutions provide in-service simulation training for office occupations teachers.

13. The U.S. Office of Education publish a guide for the teaching of simulation in high school and post-high school institutions.

14. Because of the extensive work and specialized nature of simulation package development, a package should be developed for teacher use.

APPENDIX A

STATE	PARTICIPANT	ADDRESS
ALASKA	Mrs. Agatha B. Prator	3717 Knik Avenue, Anchorage, 99503
CALIFORNIA	Mrs. Lela M. Chaney	1300 W. Grangeville Blvd., Hanford 93230
COLORADO	Mrs. M. Darlene Adams	19495 W. 62nd Pl., Arvada, 80002
DELEWARE	Miss Elinor J. Short	6 Woodshaw Road, Newark, 19711
FLORIDA	Mrs. Alzora R. Simmons	727 NW 15th Ave., Fort Lauderdale, 33311
GEORGIA	Miss Julia McCrimmon	710 Hand Street, Pelham, 31779
KENTUCKY	Mrs. Mable A. Davenport	1628 Crestview Dr., Madisonville, 43431
KENTUCKY	Mrs. Bobbie Jean Karsner	Route 3, Georgetown, 40324
IDAHO	Mrs. Virginia P. Price	73 Harper Ave., Driggs, 83422
ILLINOIS	Mrs. Rose A. Davis	610 N. Third St., Wood River 62095
INDIANA	Mrs. Marjorie W. Baran	1918 West Second Ave., Gary, 46404
IOWA	Mr. Vernon R. Fennell	1501 Frazier Ave., Des Moines, 50315
LOUISIANA	Miss Neva J. Willis	240 Riverdale H.S., New Orleans, 70121
MAINE	Mr. Sarandos Giftos	Cape Elizabeth
MARYLAND	Mrs. Elenor B. Miller	115 Washington Road, Westminister, 21157
MICHIGAN	Mr. Gerald M. Brown	314 S. Holmes Street, Lansing, 48912
MISSOURI	Mrs. Virginia Barger	R.R.I., Box 71, Joplin, 64801
MONTANA	Miss Frances E. Neal	19½ Yellowstone, Billings, 59102
NEBRASKA	Mr. Charles D. Pickering	1449 Mohawk Street, Syracuse, 68446
NEVADA	Mrs. Lucy McCuskey	P.O. Box 522, Fallon, 89406
NEW HAMPSHIRE	Mrs. Theresa L. Sullivan	45 River Road, Andover, Mass., 01810
NEW YORK	Mr. Frank M. Mitchell, Jr.	1088 Bradley Road, Genoa, 13071
NORTH CAROLINA	Mrs. Maud M. Coble	321 W. Oakdale St., Mont Airy, 27030
OHIO	Miss Rosella Honekamp	5750 Adelphi Street, Cincinnati, 27030

STATE	PARTICIPANT	ADDRESS
OREGON	Mr. Wendell J. Heintzman	815 East Fifth, Albany, 97321
PENNSYLVANIA	Miss Janice L. Reed	718 Edgmoor Court, Lancaster, 17601
SOUTH DAKOTA	Mrs. Lorraine V. Cleven	2808 South Lyndale, Sioux Falls, 57105
TENNESSEE	Mrs. Norma A. Erickson	150 Nebraska Ave., Oak Ridge, 57830
TEXAS	Mrs. Jerry McCasland	1305 Haines, College Station, 77804
UTAH	Mrs. Faun M. Chidester	575 E. 600 N., Heber, 84032
VERMONT	Mr. Robert E. Houle	Silk Road, Bennington, 05201
WASHINGTON	Mrs. Athyleen F. Nicholson	1130 North L Street, Tacoma, 98403
WASHINGTON D.C.	Mrs. Lucille Polk	4035 Twentieth St., N.E. D. C., 20018
WEST VIRGINIA	Mr. Louis Loudermilk	134 W. Gardner Ave., Belle, 25015
WISCONSIN	Mr. Martin D. Singkofer	1433 Kane Street, La Cross, 54601
WISCONSIN	Mrs. Phyllis Heath	5720 S. 41st Street, Milwaukee, 53221

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APPENDIX B

SIMULATION PRINCIPLES

by Garth A. Hanson

Office simulation is a very important concept, and you are going to see a lot more simulation in office education now than you ever have in the past. It's a new twist on an old game. We are simulating the office in the classroom and we can actually perform office work in the classroom, if necessary. Again, the whole idea of simulation according to Webster, is to assume the appearance of an office in the classroom, and that's what simulation is all about.

There are two basic kinds of simulation, (1) non-computer based and (2) computer based. We now are working with the non-computer based simulation. One of the weaknesses of non-computer based simulation is the fact that it's very difficult to evaluate and control. If you can feed the material in the computer, I feed the variables into the computer and the print out says, "Give student #1 this much work to do to meet his needs." Well, a non-computer based program, can be adjusted but it has to be adjusted by people. We are working with, and I think within the next ten years we will develop, a computer based program which will work into a statewide computer system which the schools will be using in Utah. At this point, however, we are working with the non-computer based program.

Simulation isn't new; it's been around for a long time. We've had practice sets, which is a form of simulation; and we use several textbooks in one class to try out simulation office conditions. It took so long in coming to the front because the money was not available to produce it. The Vocational Act of 1963 provided funds for office occupations and when you've got money you're a lot better off than when you don't. Teachers have done a good job but have been unsuccessful in disseminating simulation to other teachers. One teacher could do it but another one couldn't. Communication was part of the problem. People didn't know what went on, and then a problem of developing a universally accepted package arose. We are developing a package from our mobile office education unit this year we hope that we will be able to provide six schools in the state of Utah with a package, a simulation package to use in their classroom, and from this we hope to develop a package we can hand you as a teacher and say, "Here is a simulation package that will work. If you'll come to a one-week workshop we will have you work through it, and you can initiate it into the classroom if you want to teach that way, and we'll go from there." We think we've got something that will work. We'll know more later.

Now for the role of simulation, and please let's get this straight. Simulation is not the only way to teach. There are a lot of good ways;

simulation is one way. Our objective in office occupations is to get the student from one side of the stream to the entry job which is on the other side. There are several ways of doing it. Step number one, they have to have basic education and this they are getting in the public schools. They then have to have basic skills which include typewriting, shorthand, and other office skills, depending on what office area they enter. From there they can go into a co-op program if your school offers it; they can go into a simulation program if you have it at your school; or you can go into a directed learning program which is a program which puts students into high school offices for experience. Any one of these is a direction into job entry. Some start with the skills and jump over these other three and go right into job entry. Our goal is to get into the job entry level, and there are several ways of doing this. Some programs fit several different schools. The small rural school can readily use the simulation program. The directed learning cannot function in a small school because there are not enough teacher offices to give students the opportunity for diversified work experiences. The co-op program cannot work in the small rural schools, or even perhaps in the consolidated rural schools because of their locations. You might think of Piute High School at Junction, Utah. If you've ever been down there, there isn't even a junction in Junction. It's a fine school, don't get me wrong, but there is no way of putting a co-op program into it. I think you'll just have to, as a teacher, decide which program will do you the most good.

There are many advantages to simulation. We have lived with this thing for about two years now; we're getting pretty excited more and more each year. One of the advantages of simulation is the fact that we can work with students in office-like situations; and when something goes wrong, we can say, "Students, stop, destroy everything on your desks; we are going to start over tomorrow." You can't do that in a business. We can cooperate with the business, and this we have done extensively so that our program is as much like a business as we can get it. We have individualized instruction. Each day the teacher, and I wish you could go down and see him in operation, goes through the class and says, "This student is really not too fast at handling coupons. She can only handle three coupons in the period." So he feeds three coupons into this position. He may find that another student can handle 50 coupons in that two-hour period, so he adjusts the program for that. That's something else you cannot do in a real office situation. You have to take the work that's there as it has to be done.

One of the exciting things that we've found in simulation is that the students interact with each other. We had one fellow who was the Vice President, and his financee was the Executive Secretary, and she brought letters to him for signatures that weren't up to par. He made her type them over again. I don't know what happened after that, but this was business as far as business was concerned. This interaction has been very good. And when they get through with this office, we've had some students who have come out of MOE and said, "I hope I never ever see another office." We just feel great about that because if they have found out that much in their program, it's the finest thing of all. Others come out saying, "Boy, I can hardly wait to get into an office for real." We've had others that come out and say, "Boy, I like the Vice President, Executive Secretary, and the Cashier; but that Posting Clerk position will drive me up a tree." A gal right behind her said "Boy, I could sit there and post all day long." See, that is the individualized instruction we must meet.

Simulation contains many important ingredients. All are important to a successful operation.

1. Simulation must simulate something. A program is only as good as its contents and in order for simulation to produce the best results, it must simulate a true office in action. The superintendents, principals, and teachers in Utah say that simulation has succeeded because it has something to offer. The MOE simulation is taken from Utah Mortgage Loan Corporation, Logan, Utah. Two teams of interviewers went to UMLC and asked them pertinent questions as to what their operation is all about. Each office worker was asked "What do you do, what papers cross your desk, where do they go, what happens to them when they get there, what office equipment do you need to process them, etc. All of the necessary forms were collected along with the information.

2. Define the limits. It is not the purpose of simulation to copy the office routine to the exact letter so the information collected has to be adapted to the classroom. It has to be placed in two hour modules so as to fit in a two-hour block of time. The material has to be developed to fit in the yearly schedule, in the classroom facility, and be kept small enough so that it can be evaluated and controlled.

3. Select student stations. From the information gathered from Utah Mortgage Loan Corporation, student stations were selected which most nearly met the educational needs of the students as well as the functions of the mortgage loan business. The following positions were selected:

Administrative Assistant	A position which is not a function of the office but rather a function of the outside world. This student controls the input to the office under the supervision of the teacher.
Cashier	A position which includes making deposits, receiving mail, telephone techniques, posts to accounts, types letters etc.
Executive Secretary	The objective of this position is to report to the executive and take care of his office needs. The duties usually include dictation, transcription, payroll procedures etc.
Insurance Clerk	A student at this position has the obligation to see that all mortgages are properly insured. She works with tickler files, telephone, letter writing and posting.

Posting and Tax Clerk	This worker posts the amounts from the customer coupons and investor information and posts to their accounts. This person also makes sure that taxes are paid on each piece of mortgaged property.
Receptionist	The Receptionist answers and transfers telephone input, acts as the mail carrier, does the filing, and some duplicating. Her prime duties are at the Receptionist desk.
Vice President	Since all offices must have a leader, this office calls him a Vice President. The duties include dictation, work load adjustments in case of absences, payroll and telephone responsibilities.

The offices are kept small for evaluation and administration control. A minimum of seven students are needed to operate one office. When more are involved additional offices are established as needed, usually within the same classroom.

4. Define basic routines. Each objective was identified and related to one of the above mentioned positions. A basic routine was outlined so each student would know the essentials of each position. These routines were then flow-diagrammed so they would fit with all of the other routines in the office.

5. Prepare job description manuals. A manual was prepared for each position so that any worker could accomplish any task by referring to the job description in that manual. Each operation was carefully described in detail.

6. Develop a basic script. As the students rotate through the simulation, they will be doing basically the same tasks at each position. These tasks were outlined in each phase with space provided for additional input or deletions as needed for individual differences. The teacher then simply goes to the file and selects the necessary input for each individual position and inserts it into the system.

7. Add a contingency list. A file is created which can be used when inserting information needed for individual differences. This file contains telephone situations, correspondence situations, dictation and customer situations. The teacher is responsible to see that this list grows as it is used.

8. Conduct debriefings. The simulation is designed for student use and as much learning must take place as possible. When the need arises, it is important that the students be called into a debriefing to discuss the important office concepts as they happen. This could be done with each individual, each office, or the entire class, whenever and however it is needed.

9. Establish evaluation procedures. Grading procedures follow the debriefing. To evaluate the skills we have rush jobs. In these rush jobs, we have established a situation so that we can go to the Executive Secretary for instance, through the Vice President with these instructions: "The President needs these done in 20 minutes." It could be letters or a payroll situation of some kind. We then tell them that they are to de-emphasize their MOE work and get these done as quickly as possible. They know that it is an examination of sorts.

During the examination we are going to interrupt them with telephone calls; we're going to interrupt them with work where the student comes to that desk and bothers them as such. We're going to try to control it and we're right now trying to establish norms, so when we get through we not only see how fast she can type four letters, but we can see how fast she can type the four letters with interruptions and how well she gets back to her work. I think, finally, we are getting into an area where we can test as it really is in an office. The attitude, responsibility, and adaptability can be taken care of by the Vice President in the daily evaluation. We have a video tape recording machine where we can record the student at work for 30 minutes. Somehow when these gals see themselves on this tape, the short skirts don't become quite the problem that they used to, we don't have to lecture on why you shouldn't wear short skirts, unless you know how to sit in them. And gum chewing has been no problem at all when they see themselves in action. It's interesting that some of these things are better than words. Well, we have these positions; it's an exciting program; I can't say enough good about it. We have four phases in the simulation which will have to be discussed at another time.

Utah is a pretty great state. I think there are things going on in office occupations that are about as exciting as anywhere in the country, so exciting that, as Mr. Parker mentioned, last week we received the go ahead for MOE #2. We don't know just where it will go, but we have had a lot of offers. It will service 19 students, which will involve three complete offices as such. It will be 12 feet wide and 44 feet long which is really going to be pretty exciting. It will be ready some time in Summer, 1969.

Simulation is a very exciting way to teach office occupations. It provides the realism which is so important for office learners. I have touched quite briefly on some of the characteristics in our simulation. I hope that we get another chance to talk. Thank you.

APPENDIX C

SIMULATION FOR POVERTY AREA TRAINING PROGRAMS

Chuck Bustya, Systems Planner
System Development Corporation
Santa Monica, California
July 15, 1968

I'd like to consider some of the causes of existing poverty before I go on to how in a poverty area you might use simulation. I don't want this to be a testimonial to the fact that poverty exists. We all know that it exists and I don't want to take sides on one side of the fence or another as to how you should treat it. One of the important differences that the socially-handicapped fail tc recognize either by color of skin or economically otherwise, is that there is a tremendous language difference between us. We as middle class people speak a different language. There are a lot of studies that have been done on the subject. People who grow up in a poverty-stricken area have a very small vocabulary and it is based primarily on senses--feelings, hearing, seeing, and this is a "prove it to me" type of philosophy. With such a vocabulary, they are restricted mainly to nouns. It can be shown psychologically that this limits them conceptually. That's why so often we have problems with them in the classroom and we can't understand it.

I guess you know a lot about the other problems they have--the fact that they are so mobile, they have no roots. This is problem factor. They live in dilapidated homes in the environment of overcrowding. There is an awful lot of family separation, particularly in the black race, and black areas. They are terribly restricted to their own environment, and this kind of social isolation is pretty rough on them. They have few adult "models." There is a real scarcity of books, instructive toys, even pencils. You know how important it is for your kids and my kids to have pencils and crayons and paper around the house. One of the greatest things that probably happens in talking about white color crime is dragging home pencils and paper to kids from work. They have no home experiences that have any value. They have no successful experiences in the environment that have any value. They have no successful experiences in the environment in which they live which are two important things. Just think of the success that you're having just here today. These kids don't have these kinds of things. There are no youth organizations. Little things like this, just having the right kinds of clothes to look right and feel right. These things create all kinds of problems for them. And then on top of all that,you've got discrimination and segregation.

Now, I want to show you what a lot of this adds up to. I saw something very interesting. You know what projective tests are in psychology. They have a very interesting test called the World Projection Test for children, where they give the child about $80 worth of toys, and they give the child an hour or two to sit down on the floor to play with it, while someone observes. They then create their world with these little toys. Well educated, middle class, white children do a pretty good job of putting together a world as we see it today. Kids who are disadvantaged have problems and create all kinds of strange worlds. For example, all the trees may be lined up in a line like a snake, and you can see all kinds of significant differences. When they use a projective technique of drawing and they ask a child to draw a tree or a human being, typically children in this category have all kinds of problems. The middle class child will draw a beautiful tree (he demonstrates) with all kinds of branches in its full concept at about the third grade level, the fourth grade level, the fifth grade level, something like that, and a child particularly in the ghetto areas, most of them black children, when asked to draw a tree, have no idea what a tree is. You get something that looks pretty bad. Their concepts just aren't there, and that's part of this restrictive environment, no success, inability to see things--all kinds of things.

When they're asked to draw a human being, a typical third grader can do a pretty good job drawing a human being. You see hands, you see legs, you see clothing on them, you see faces, you see a lot of interesting things. But the poverty-stricken child, the socially handicapped child draws faceless stick figures. Sometimes their hanging on a tree--all kinds of weird, out-of-context things that they'll draw. What does this all mean? Psychologists say it's this empty shell of a life that they have and that in these pictures that they draw they are depicting this emptiness that they have. It really stirs me when I see things like this. It bothers me tremendously. A faceless person when you have been around your mother and father for say 8 or so years, and you still see faceless people. How empty is your life if you can't draw some eyes into it. Two thirds of these kids in these areas don't put faces on their adults when they draw them. Most of them don't put arms on, and these are stick figures.

When you bump into people later in life and you recognize them as having this empty shell, I think you understand what I mean, and that is what is being created in these areas. The emptiness of their world, and the undeveloped nature of their minds--what do we get when we have kids with that type of problem? We get an indifference to responsibility. Okay, you say in your classroom. It's frustrating. It's a real problem. They don't know what the concept of time is. I've talked to teachers in my classroom who teach in the Watts area and they tell me that these kids come to school at 10:30-11:00 O'clock in the morning and you try to say something to them about you're late--no concept of time. "I'm here aren't I." This is their feeling, "It really was an effort to get here. What else do you expect of me?"

They have a low level of reading ability. You know all of this. They're slow intellectually. They have poor health habits. They're anti-intellectual. Much of their activity is non-purposeful--as a matter of fact very disruptive. They have all kinds of limited experience of the kind that our kids have in school. The school day is long and tedious for them.

If this is the case, how can we treat it from a very limited approach--that is from the world of simulation. There's not too much that I feel can be done with simulation. I can give you some general good and general ideas and let me tell you what they are. I think first of all you have to give them a facility--something like MOE, that gives them a sense of worth, or value. Something that is theirs, that is a good environment for them. MOE has done that. You can talk to Bob Stocker about the happy little faces out there, the way they feel, how they think they own that place, how wonderful it is. They need responsibility. They have no notion of what responsibility is and you can give it to them by allowing them to participate in a simulation. In building it as well as in lifelike decision making capabilities right there in a simulation. I think that a simulation that is full of decisions is one that is important for them.

In the process of providing this for them, I think that you have to give them an accepting climate so that they don't have a spirit of rejection. This need to be so very defensive which so many of them have will give them a lot of self respect. Be courteous to these kids and recognize them so that they can build a far better self image. In one of my classes I have a leader of the brown people in the Watts area and I have a couple of people that have been involved in riots, LSD and all that sort of thing, but nevertheless are leaders in the Black population too and one of the things that they keep throwing at me and one of the roughest things for me to overcome is--"We don't want to play baseball, Mr. Bustya. I don't like baseball. We don't like the rules of your generation. We have our own games that we want to play. Why should we have to play your games, and why do you want to play umpire with a whip to make sure that we play your game." And this is a hard one to answer. Why should they have to play my game? But I think that our game is a good game, otherwise I wouldn't try to do something about it. But I think that in telling them that it is a good game and in getting them to accept our game, we have to do something about it. So giving them this acceptive climate, giving them responsibility, giving them all the things that will eventually lead them to the middle class way of life, I think that all the things we have to do are important.

Now, its possible that with something like a simulation van (MOE), it can give them cultural enrichment. You can actually take them with the van, if its legally possible, on the highway to various places. If you can't actually take them to various places, then through simulation you can give them the experience, the cultural experience they need. You could, it seems to me, simulate the kinds of environments that they are going to work in. It can be a simulated cheese factory, or a sugar beet factory. Something that is meaningful to these people and that gets them up by the boot straps into something that they are interested in or have to be in or whatever it is.

I think that through simulation you could also show them the differences between the language that they must use at home and the language that they have to use to exist in the middle class, white-walk, community. I think that is a real important thing. I have made the mistake myself in telling these people that they speak differently, not realizing that in a sense that I was jabbing, punching, with my superior position. I think that, therefore, it should be said something like this--that there is a difference but that there is a place for each. I don't think that there should be any failures in a class particularlyin a simulation. How to live in the business world and in the home environment — what is the difference between them? I think you can do this with simulation. You can demonstrate it, and that would be an important contribution to these people. And finally, probably the most important contribution that you could make, is through the experience of simulation to show these kids the kinds of experience and human relations that they're going to get with the middle class. In other words, if you're going to go into an office environment this is the way its going to be and you have no concept of how it is now and the way you live with your values in a poverty stricken area is not the way that you can get by in the business community, so show them the difference between the two. And if it has to be, then it's a game for them and they learn to play the game so they can get by. But I think that's an important thing.

APPENDIX D

ADMINISTRATIVE ASSISTANT

The Administrative Assistant is perhaps the most challenging of all the positions in the office simulation. Most of what happens in the office is initiated by this position. You represent the outside world in its entirety. In this position you will gain a great deal of insight in the office operation within the company, with other companies, and the public the company serves. You must follow instructions. The success of this program depends upon it. You will need to develop telephone techniques and an ability to work with your fellow workers. You may even be asked by the teacher to keep a record of some of the simulation activities for grading purposes.

The rate of flow of office activities will be regulated for the most part from your position. In most cases, you will be prompted by the teacher or the Vice President but don't be afraid to make your own observations. Through these observations you may see a need to initiate more or less business. Check with the teacher before you make any changes. You will be surprised how much you can help the teacher in making a successful program.

Your activities are governed by a script which indicates to you at prescribed times when you should perform any function of the simulation. You are to make sure the proper material is in your packet to match the script for each day.

Your script will ask you to present different situations on varying occasions. If you are asked to be a real estate agent calling for information about a loan for a customer, try to see yourself as an agent. Prepare some notes as to things you might say to probable responses. If you are any kind of a ham actor, your Administrative Assistant duties will be even more interesting.

The script may ask you to be an irate customer, an inquiring customer, or you may be asked to think up a call to an individual position on your own. Have a good time but be as realistic as you can and don't fall out of character. If you need some suggestions, don't be afraid to call on the teacher. Your own imagination and initiative is of utmost importance in this position.

When you answer the telephone, use proper business telephone techniques. Answer by saying, "Administrative Assistant, Miss Jones speaking." If the teacher's phone rings and he is out, answer by saying, "President Stocker's office, Miss Jones speaking, May I help you?" Then take a message.

You have a recorder capable of recording all of the phone conversations. This is very important in the debriefing sessions which will be conducted. Record calls as they are indicated in the script.

We think that you will find this position is exciting to perform. You will have the opportunity to watch people respond to various inputs to the office. You will be able to observe the effect of each input to all positions through these activities. You will learn a lot about the functions of the office.

Be careful that the atmosphere of the office is not sacrificed in order to return a favor, get even, or just have fun. The relationship between the Administrative Assistant and the office workers is very important. Actually, you are many people to the office. You cannot be considered simply an Administrative Assistant. At one moment you may be a person on the telephone and the next moment you are a person delivering a telegram. Other than these short visits as a certain personality, you are more of a thing than a person. Playing favorites is completely out of the question. There should be no communication with the Administrative Assistant by workers other than in response to the script or simulation initiated input. We hope that you will enjoy being an Administrative Assistant and that you will learn a great deal about how an office functions. Your teacher will be glad to help you with any problems you have. Be careful in asking for too much assistance as you must learn by solving problems for yourself. Remember that you are an assistant in every sense of the word. Be ready to help at any time. There may be times when you find yourself with little to do. Take that time to develop ideas of how you may have a better simulation. Good luck.

CASHIER

Welcome to the cashier's position.

Coupons enter the office attached to a check. These coupons are very vital to the function of a mortgage loan company. Whenever a loan is issued, the monthly payment is usually made by check through the mail. Each customer is provided with a set of coupons which have been pre-coded so all that a customer needs to do is attach his check to the coupon, place them both in an envelope and mail them to the mortgage loan office. MOE, INC., is a mortgage loan business, and you as a cashier will receive these coupons and checks from customers through the mail daily.

You also have a deposit slip. You are to total the checks which are attached to the coupons you receive each day. Each check is to be posted individually to the deposit slip. The complete deposit slip is to be filled out as indicated in your procedures manual.

The investor's ledger sheet is used to record all transactions for each investor. Each investor has a separate sheet for this purpose. A mortgage loan company has one basic function. It provides money for people like you and me to use in purchasing a home or piece of property. The mortgage loan company receives their money from investors, people or large corporations with money to invest, and lends it out at a slightly higher rate of interest than they pay for it in order to make a profit. A record must be kept of all money received so that it is returned to the proper investor. The ledger sheets are used for that purpose.

The amortization schedules look like numbers unlimited. The basic information about the loan is recorded across the top of the page. The column of numbers are used to identify the amount of principal and interest included in each payment.

The daily summary and recap sheet indicates the total that each investor will receive from each day's receipts. The amount the investor will receive is different from the amount of the payment listed on the coupon. The investor receives only the principal, interest, and late charges which are due him. Other factors in the payment like insurance and tax payments are kept in reserve by the mortgage loan company. You must get the amount owed to each investor from the appropriate amortization schedule.

You also have a petty cash fund. It is important that you can account for all petty cash money. Control of the petty cash fund is accomplished by using the petty cash receipt and report form. This form must be signed by you personally each day as you receive your petty cash. You are to record the cash, checks, and the total. After you sign it, get an initial from the Vice President as an acknowledgement of receipt. Place the form back in the folder. The petty cash is to be placed in your desk.

There is a welcome letter which states: "Welcome to MOE." This letter is written to every new customer upon receipt of their first payment.

A payment facts sheet accompanies the welcome letter to the borrower and indicates helpful information for his future use. Since this form is quite detailed, please refer to your procedures manual for specific instructions.

MOE letterheads are to be used for your letters. Refer to your procedures manual for the letter styles and recommendations to be used in letters.

EXECUTIVE SECRETARY

The role of the Executive Secretary is to work with, and under the direction of, the Vice President. In performing your duties you will develop your ability to be tactful, to be discrete and to perfect your skills. You will make some decisions while working in a supervisory capacity, and while doing other assignments.

You will undoubtedly be faced with a situation that will require you to organize the work you receive from the Vice President. That is, to list all of your tasks in order of importance and then begin working on the most important items. The material that leaves an office reflects the business and the Vice President. Therefore, it is very important that top quality skill is used in typing the dictation or other work that will come from the Vice President's desk.

As part of your duties you may be called to compose short letters, parts of letters, or to obtain information to complete letters. Another important task for which your best skill will be required is that of taking and transcribing dictation. It is conceivable that you may be called upon to take dictation in a conference, or over the telephone. The Executive Secretary is expected to perform at a much higher level than most other clerical personnel in the office.

You may be required to balance the work load of other clerical personnel within the office. Quite often, depending upon the capability or lack of capability of individuals in the office, work will pile up. The need for redistributing the work load becomes apparent. Work priorities will dictate which tasks must be accomplished first. The Executive Secretary will be required to survey the work situation and make certain excess work is redistributed according to the need for completing it, and according to the abilities of those working in the office. The skill involved in interacting with the office personnel in reassigning work will be most valuable.

At all times, the Executive Secretary will be available to take telephone calls for the Vice President, and to screen any calls that she feels she can handle. Any work in process will be interrupted for this, or to perform other duties requested of the Vice President, such as taking dictation, planning convention itineraries, or making a long distance phone call. Where overload problems occur, the Executive Secretary will interrupt her work to facilitate the work flow.

You will be typing on a proportional spacing typewriter. It is used in many executive secretarial positions. It differs in many ways from the conventional typewriter. You will find an instructions manual in your desk drawer. Take a few minutes to go through some of the processes. See your procedures manual for details.

You will also be using a transcribing machine. These machines come in many shapes and sizes. Your machine will only transcribe. The Vice President has a machine that can be used for dictation.

Take the Executive Secretary Procedures Manual from your folder and become acquainted with its contents. It will be wise to become acquainted with the MOE letterhead and memorandum form. Then turn to the task sheet and begin work.

INSURANCE CLERK

Welcome to the Insurance Clerk position, a very vital link in the complete operation of MOE, INC.

Your purpose as an Insurance Clerk is to see that all loans are adequately insured. You are a person we must rely upon to accomplish this with little supervision.

You will see many fire insurance policies. These policies contain all of the essential information necessary for adequate insurance. A real policy is much more complete and office-looking but because of the difficulty of reproducing an actual policy, we provide the important information only. Later you must check all of this information against the Master Customer List to see that all information is correct.

When policies are found to contain errors, you will use a policy correction form. You must indicate on this form what is to be corrected and send it to the insurance company.

A policy letter indicates that insurance has been approved. When you find that the insurance policy is correct in all detail, you are to type a policy letter to the customer indicating that this insurance has been obtained by MOE, INC., for his mortgage.

Insurance premiums can be paid along with mortgage payments. One thing you should understand is that the deposit for taxes and for fire insurance is not a payment on the mortgage. These payments are a deposit which is held by MOE, INC., so taxes or insurance can be paid when they come due at a later date.

The tickler card has many uses. It is filed according to the insurance expiration date in the upper right hand corner. It is also used for checking the accuracy of the policy cancellation letter. Remember . . . it is your responsibility to see that all mortgages are insured.

POSTING AND TAX CLERK

Today you are the Posting and Tax Clerk. Under normal office circumstances you will receive the coupons from the Cashier after they have been processed at that station. It is a major document with MOE, INC., and one with which you will become very familiar.

There is a borrower's ledger to match each of the coupons. Each borrower has one ledger. The ledger is initiated when the borrower opens a loan. All transactions made by the borrower are recorded to the ledger by the posting machine.

Amortization schedules are used frequently. An amortization schedule is merely a long prepared list of payments showing the amount of interest and principal paid with each payment along with the new balance of that loan.

The daily summary and recap sheet is also used here. During each working day, the amount of receipts for each investor is to be recorded as to the interest, principal, and late charges collected for that investor.

RECEPTIONIST

As receptionist, you are the voice and ears of your company. All of what you say and how you say it as you answer the telephone or greet a visitor presents an image, an image of both you and the company for which you work.

Let us first consider your duties at the telephone. Your voice should be the voice with a smile. Each caller should be assured that you are interested in what he is saying, and that he will receive a satisfactory answer for every question asked. You must become familiar with the methods of screening calls: that is, to determine which of the workers in the office can best answer the question being asked. Many times a person will ask for the Vice President seeking an answer to a question when in reality the Cashier or Insurance Clerk could answer the question more adequately. You could save the caller much time if his question were directed to the proper people initially. In referring callers to MOE workers, it is important that they know who is calling in advance. Methods of obtaining names from the callers are outlined in various resource tests available in the MOE, INC., library, and should be consulted. These references are listed in your procedures manual.

A great deal of skill is required in handling the call director when several calls come in at the same time. The proper use of the hold key and the memorization of all employee telephone numbers will help facilitate the use of this instrument. When messages are left for someone in the office, they should be written completely and accurately. Phone numbers to call should be repeated in order to ensure their accuracy.

Another important function of the Receptionist is that of greeting callers who come to visit MOE, INC. The same kind of courtesy must be extended to these people as to those on the telephone. No one should be kept waiting without repeated verbal attention given to them in one way or another. Tours through MOE, INC., should be handled in a very efficient and informative way. All questions should be answered without going into great detail. If you do not have an answer you should remember the question and have someone else answer the question later in the tour. Tour hints are included in your procedures manual.

Individual callers who are on business should be referred directly to the person who can most efficiently help them.

Handling the mail will be another important function of the Receptionist. You will open, scan, and sort all mail, except that marked "personal." You must learn how to select the proper mailing service for all the different types of outgoing mail.

Be sure to refer to the call director operation guide whenever any problem arises concerning that instrument.

After you have read your procedures manual, go to your task sheet and begin to complete the jobs assigned to you. On these jobs, you should be original and imaginative.

VICE PRESIDENT

As Vice President, your role in the office has three parts. One is seeing that the office functions properly; two to assist other members of the office staff, and three to rearrange workloads when necessary. You come under the direct supervision of the teacher, and will assist him when so directed. You will play an important role in the evaluation of other members of the staff.

As the need arises, you are to dictate letters and memoranda. You should never dictate a letter or memo before you outline and make notes about them. You have a dictation machine on your desk. Learn how to use it. Also use your secretary for dictating if she takes shorthand. You should be sure that your secretary has something to do at all times. It is important that all correspondence leaving your office reflects a good image for the company. Get it out as soon after dictation as possible.

You and your secretary are to work together in completing a salary and payroll register. Once you both understand the process, you may have your secretary complete the register. You should check all of the work as the secretary completes it.

You have two payroll and salary register forms. One is for you and the secretary to use for a rough draft, or working copy. The second copy is used by the secretary to make a final copy. You have $2,000 in your payroll account. Office salaries will be broken down as indicated on your task sheet. A monthly payroll period table published by the Internal Revenue Service is also furnished which tells how much money should be taken out for taxes and social security.

You are expected to evaluate each student in each position. Give a suggested letter grade for the person you are evaluating, then fill in the date on each form as it is completed. This is an important part of your position. Give honest evaluations. They will be kept confidential.

APPENDIX E

Audit
DEPARTMENT

Payroll Clerk
POSITION

SAMPLE DATA GATHERING
INSTRUMENT AND DATA

INPUT	FORMS	ACTION	DESTINATION	EQUIPMENT
Time Card A-1 Commission Report, A-22	Payroll Time Card, A-1* Payroll Summary Sheet, A-2*	Add hours; compute salary; complete deductions as listed on card. Record information on card and Summary Payroll Sheet.	File Drawer	Payroll file drawer for each week; 10-key printer
Paryoll Summary Sheet A-2	Time Card, A-1* Summary Sheet, A-2*	Record information from time cards to sheet; balance sheet for totals; hold sheet for recording on Employee's Statement of earnings and deductions.	File	10-key printer
Employee Statement of earnings and deductions, A-3 or A-4	Statement, A-3 or A-4	Record information to employee statement individually. Send to Cashier for check writing or cash envelope.	Cashier	Typewriter
Receive Side "A" of Form A-15 from Audit Manager	A-2*	File until end of week or pay period at which time commissions are figured and included on payroll summary sheet, A-2.	File	

*Form not available at store--must be created

APPENDIX F

DYNAMICS OF EDUCATION FOR OFFICE OCCUPATIONS

Thursday, July 11, 1968
Dr. Bruce I. Blackstone
7:00 p.m.

In the U. S. Office of Education, we have representation in this Workshop as we have mentioned before, Dr. Bruce I. Blackstone. Dr. Blackstone has worked very hard to accomplish the goals that have been established in office occupations. I met him a couple of years ago in Denver and have met with him several times since. As we talked in January about the proposal to hold this Practicum, he said he would like to have one out in the West if he could find someone to do it. We submitted a proposal and have been in touch with him constantly throughout the submission and after, asking how things were coming and he said it was touch-and-go for some time, but we got the U. S. Office of Education acceptance, and that is why you are here. It is through his efforts, on a great part, that you are here today, and we appreciate the work he has done with the U. S. Office of Education to push office occupations forward. Tonight he has a message for us that I think you will find very interesting so we will turn the time over to Dr. Blackstone.

I bring you the compliments of the U. S. Office of Education. It is always a real pleasure for me to be with a group like this and, particularly, to be at Utah State University. It is home-type country for me because we lived in Moscow, Idaho, for six years while I was head of the Business Education and Secretary Administration program at the University of Idaho. I also was a business educator at the University of Washington in Seattle for a number of years. I still have a few of my friends and colleagues active in this area. You have heard the name--Beverley Funk. She was one of my students and she has been so successful using this simulated method. I wanted to also bring some of you up to date to the fact that I have kicked around in the realm of the academic preparation field. I have been a teacher educator; an administrator; served overseas in Iran for a couple of years; and have had the extreme good pleasure of being associated with many of the leaders in the field of business education, either directly or indirectly, through my father. The field of business education is one which is very dear to me. I look on its betterment as an extremely important aspect of the development of education in this country. I am here to talk about office occupations education which is a segment of business education, the title of which is something to do with the dynamics of office occupations education.

The problem of dynamics is something we must consider today. The dynamics of education for office occupations is found in the changing social order that we have today. The changing need of our economic and defense system is at a crossroad in our development. The ferment of change goes very deep and even some of the so-called everlasting truths of education are being examined today.

Education is being recognized as the major tool available to society which will make change by evolution not by revolution. Its overall objectives are determined by the culture of its supporting society--the life activities of that society. Our life is changing. Our social structure is changing. Our education is changing. The sociological needs of the community determine what education is. These needs must be expressed in terms of the individual and in terms of the group. They interact upon each other. But both must be considered. Education should be planned to change behavior and its objectives expressed in terms of behavior or doing.

One time I played 6 or 7 musical instruments. I have a background in literature. I like painting. But how do you measure appreciation of music? How do you measure appreciation of literature? Appreciation is not amiable to measurement. It is amiable to value judgment, but not measurement. This is why I am very concerned about our needs to work in terms of changed behavior.

Now education is a tool. If I were to do like Fagen did and establish a school for pickpockets, and the persons who went through this school were better pickpockets than any other pickpockets, I have found a good educational program--not a desirable one--but a good one. What I am trying to say to you is they start here, they go to here, and in between these two points of time, there is a measurable change of behavior. They do things differently at the end of the program than they did at the start. This we can measure.

Now let's talk about the principle of probability. What are the probable experiences to be faced by a youngster when he is complacent? What are the behavioral skills that he will need? What are the social skills that he will need to put these behavioral skills into operation? Until we know these things, we can't set legitimate behavioral objectives. Once we know what we are teaching for (and we have enough techniques now so we can do it), we can achieve these objectives. The principle of reality is important to us today. I am somewhat amused to hear people extol the virtues of studying Latin; but I remember very small children, two and three years old, learning how to speak Latin. Very small children learn to speak French and Spanish. There is nothing inherently good in these languages.

The principle of compatibility is important also--what we offer should be, in turn, in balance with the total field of education with all of the activities in vocational education with the field of business education and it should be balanced in the field of office occupations. This means that everybody does not have to be a stenographer to be an office worker. I'm not opposed to stenographers or secretaries, but this is only one of a scope of occupations for which to prepare people. And please watch that word-occupations.

We don't teach typewriting, shorthand, or bookkeeping because in themselves these are relatively meaningless subjects. There is no virtue in the ability to write shorthand. There are many skills beyond shorthand that are necessary to prepare a person to be a good stenographer or secretary. An over-emphasis upon 120 wpm or 150 wpm is a waste of valuable time. There is no virtue in being able to balance your books unless you understand why you balance your books--unless you can use these skills as a guestimate to help you decide what to do next. No, there is no virtue in any particular course, but there is virtue in preparing people for what they will do.

Many fine business educators are not aware of a frame of reference within which education for office occupations must take place. I say this on a behavioral basis. They may be aware of it but they don't act like it. Many of these persons are unacquainted with the moors of vocational education and they either expect too much or demand too little of vocational education. This Practicum is one of a series of seminars sponsored by the Office of Education in cooperation with a number of institutions throughout the Nation. Last year there were similar meetings in Texas Tech. Mr. Hanson can tell you about that meeting. There was also a very successful seminar at the University of Southern Iowa under the direction of Reed and Wright. Jack Reed and Lucille Wright. In the last couple of days some of you have mentioned an interest to know, how one goes about getting a seminar like this established. First of all, there is a five-year plan for improvement of instruction in business education and office occupations education which has been established at the U.S. Office level. Each year we add a new plan and we try to evaluate how well we have done on last year's work. Sometimes we're happy and sometimes we're not. Last year we were happy and I think this year we will be happy.

Budget requests are submitted which ask for so many dollars to support a seminar or a series of seminars. This year we had one. Last year we had two. I asked for seven this year. The plan calls for nine next year. Don't hold your breath until we get all nine of those. We still have that six billion dollar cut that has to come off of somewhere. Anyway we do prepare the budget requests. We set up an outline of specifications which indicate the topics, the nature of the meeting, the major activities, and this sort of thing. This information is typed up in a master sheet form and a number of universities or groups are contacted and they are asked if they would like to have a seminar in this particular topic. Generally, there is a silence at the end of the question and they say well, I guess so. I then send them a Xeroxed copy of the specifications. I say a Xeroxed copy because every institution gets exactly the same information. Garth will verify this.

They have the chance to bid on these things with complete freedom. The institution then develops the plan and attempts to get together a staff, budget, and they submit it to the Office of Education Research Division. In the meantime, probably 10 more organizations have submitted similar proposals. These are evaluated by the office occupations program officer and the comments are submitted through channels. Research officers and sometimes outside readers are called upon to recommend courses of action concerning these proposals.

After the screening, a joint meeting of research and vocational officers takes place and approval or disapproval is established. If the proposal is approved, the institution is notified and they start to prepare for the seminar. There are a great many very good proposals that are not funded simply because we lack money. I am very pleased with the quality of the proposals that have been submitted in office occupations. I would say that probably six out of ten of the proposals that were submitted this year could have been approved with very minor changes if there had been sufficient money to do it. So those of you who submit proposals can be proud of how you look as a field even though you didn't get the particular proposal. I might add that any institution may submit to the research division a proposal, because we do publish a list of proposed workshops to be held and some of our most interesting proposals have come in this way.

Now this is not a one-way street. There is a contract established between the institution and the Federal Government to do a certain thing in exchange for a certain amount of money. You too, are a member of that contract, because among the specifications that you find, you find the membership requirement. For instance, a participant in this workshop should be an office occupations teacher; should plan to teach simulation and office classes next year; have not taught a federally funded simulation program; have the ability and opportunity to present information to the home state teachers after the workshop. This means Saturday and Sunday trips and speaking before groups, and explaining what you are learning here. This is the multiplier effect that we need.

You should have had previous office experience and you should have had the recommendation of the state supervisor of office occupations. This is a fairly stiff list of qualifications, and I trust we all have met them, and I'm sure that you're going to do a good job of replicating the information which you have picked up at this seminar.

In addition to the previous two seminars, which have been federally sponsored, a series of curriculum guides have been prepared over the last two years. One of these guides which is a stenographic-secretarial and related occupations guide is OE 86011 and is available through the Superintendent of Documents, Government Printing Office for $1.50. It has a considerable amount of information which should be of interest to you. For instance, it talks about the development of office occupations, how we got where we are. It presents abstracts from the provisions of the Vocational Education Act of 1963.--abstracts from the rules and regulations. Now you can't operate a program of office occupations without being familiar with these rules and regulations. There's a section on how to use the guide, a section dealing with the dictionary of occupational titles, how it is set up, how to use it, job descriptions, occupational prerequisites and suggested training. This is the place where you can go in your simulation work to find out what a notereader does. You'll discover that there is no DOT number for this, but our group of experts did discover that the job exists so we have a job description for it.

You'll find a section dealing with articulation. Where would you normally find the training for a steno III? What type of program, what level would you expect? We talk about the curriculum which is designed at three levels before entry office worker positions and upgrading the skilled office positions.

The second level is entry office positions and upgrading the specialized office positions, and the top level-entry office administration positions and upgrading to executive administrative positions. You will find in here course materials which have never been put together under cover before. Some really find work has been done and I can say that to you because I set the specifications and somebody else did the work. We have courses which are general office units which develop basic skills, specific knowledges, establish functional requirements, and mutual understandings of the office environments. There is much in here which is of value. Each of your state supervisors has a copy. I would recommend to you that you send a $1.50 and buy a copy of this from my favorite publisher, the U.S. Government Printing Office because you pay their salary as you pay mine.

In addition to this one, there are a number of other guides which have been proposed and established on a tentative discussion basis. They are available through the state supervisor. In Texas, they have reproduced all of these guides and have given them to all of the teachers. In the State of Washington, they have taken portions of the guides and made them into publications which are available to the teachers. There is quite a bit of action. Illinois has reproduced in some cases and has copies available, which include accounting and computing occupations, business data processing, systems occupations, filing, office machines, and general clerical occupations, information communication occupations, material support occupations, personnel training and related occupations, supervisory and administrative management occupations, typing and related occupations, and miscellaneous occupations. This is a complete spectrum from very low skills to very high skills.

A little later I'll talk to you about the material support guide and point out some other unique things about that publication. This seminar in the field of office occupations will be affected by the series of meetings by the state supervisors of office occupations education. The most recent of which was in Atlanta, Georgia. State supervisors will be receiving a copy of the report of this meeting and selected teacher-educators too. I think you will find considerable value in that release. Mr. Hanson and Mr. Parker attended this meeting and will perhaps comment upon it individually or before the group.

I want to pay particular respect to Mr. Parker because the key person in each state is the state supervisor of office occupations. He is the contact point. He is the one in charge of responsibility of the office occupations program in each state. This sometimes gets to be a rather weighty problem, and it involves you in many activities, but we are developing a new brand of leadership among our state supervisors which may well be the salvation of the office occupations program. With the direction of the state supervisors, your official appointee, a teacher-educator is the individual who makes it possible the training of teachers, and without trained teachers we're down the drain. It is a cooperative arrangement, but I do recommend to you that you are paying a salary of a state supervisor. Keep him busy.

Every effort is being made by the Office of Education to bring those concerned about education for office occupations together so that we can reach mutual agreement as to terminology, producers, responsibilities, and priorities. It is of particular importance that we recognize the things that have been done and build upon it instead of attempting to discover both the wheel and the axle. Most people attempt merely to discover the wheel. We do it more scientifically, and we also pick up the axle.

Let's take a look at the framework in the field of office occupations. Office occupations education is a child of the Vocational Education Act of 1963. It had its reason and its existance only within the law and the regulation. If you are not within the law and the regulation, you do not have to have an office occupations program. You may call it whatever you will but the fact is that it still will not be an office education program. Office occupations education is a combination of courses and practical experiences organized into programs of instruction to provide opportunities to persons to prepare for and achieve career objectives in office occupations. The important words are career objectives and occupations.

This program is designed to serve the needs of society, through initial, refresher, and upgrading education. It leads to employment and advancement of individuals in occupations in public enterprises and organizations, which relate to the facilitating function of the office. Now here comes a bit of philosophy. It includes such activities as the recording and retrieval of data, supervision and coordination of office activities, internal and external communications and the recording of information. Anytime you find these activities in any organization, you have an office worker. You can have an office worker in the middle of a foundry. This is difficult to explain to some of our T and I friends but we endeavor to do it to the best of our ability.

Of course, you know we also have this field of agri-business and I feel that I welcome effort in this area because I feel there is a need here. Of course, I also feel that there should be a relationship between the title of a program and the content, so I suggest instead of calling the course agri-business, that we call it office-agriculture, or would you prefer business-culture. Either of those is okay, because the emphasis is on the field of business not in the field of agriculture.

Office occupations serve the entire spectrum of individual abilities from the very low to the very high. High school students, those who have completed or left high school, those who have entered the labor market and need training and retraining, persons who have special educational disadvantages, and teachers of office occupations are the major groups which can expect service from office education programs. The overall purpose of education for office occupations is to provide individuals with skills and abilities to meet local, state, and national needs for office workers. It is for all citizens, who want, need, and can profit from that instruction. That means exactly what it says--all citizens who want, need, and can profit from. This does some very interesting things to our traditional curriculum.

Realistic consideration must be given to the needs and opportunities of the employment market, projected development, and to provide a balanced program of office education in support of the economic and defense needs of our Nation. The office has the facilitating factor in our society. It makes possible the achievements of the goals of production and distribution factors of our economy. It is the connecting link between production and distribution. Office work gets the right thing to the right place at the right time and provides management with data upon which to base decisions. Office education is making important strides in breaking away from traditional subject-oriented curriculum.

The curricula of office education consists of a sequence of educational experiences related to the occupational objectives which have been formulated through an analysis of behavioral requirements--through these skills abilities, and attitudes of business occupations. The instructional sequence is a balance of business principles which the student learns about, the environment the student will face in office work, occupational specialization, to acquire skills necessary to succeed in an office career, realistic in-school and in-office experiences with necessary supervision, direction and coordination. Education for office occupations is a vocationally oriented program stressing the career objective of the individual student. It is not a terminal program in the conventional sense of the word because the individual determines the level of training he wishes to obtain, through a program which extends from routine activity to extremely specialized.

Sometimes business educators become unwilling to face the present as well as the future. I have heard the comment to the effect, "Well the Office of Education guides are fine in big cities, but we are going to stay with typewriting, shorthand, and bookkeeping for a long, long time." Backing into the future is poor business. We have both challenges and chance today if we'll take them. The past approaches were barely good enough for that time. They are inadequate for today and are utterly impossible for the future if we are to do our assigned tasks for all people in all communities who want, need, and can profit from this instruction. In four short years we have succeeded in doing all of the things that the other vocational services have taken 50 years to develop. A great many of our achievements are only in the pilot stages now. Yet the fact is we have achieved. We can be very very proud of this.

Now the office program operates in many different settings. For instance, the high school which is a major consideration. The major purpose for this program is to provide entry level office workers. The program is based on the general education that is required of all students in the school and the basic business education offerings available as part of the academic program plus the business principles, occupational specialization and realistic office experiences provided through the office occupations program. In 1960, I started saying that the best friend of the business education program was to have a strong vocational program. The statement I have just made reaffirms that position, because we build upon what is done in basic business.

Our people are citizens of the Nation and need to learn how to consume the services of business as well as to produce services for business. The office occupations portion of a student's education is specifically related to the career objective of the student. A high school program must be in conformity of base plan requirements and must extend over a two-or three-year period for those with career objectives in office occupations. If there is a proposed change in legislation, this can be extended down to the sixth and seventh grade, perhaps on a prerequisite basis. So we are going both directions--up and down, and we're going to do a better job in serving the needs of all.

Adequate coordination, direction, and supervision of realistic work experience phases of the program must be provided and here the important word is realistic. That doesn't mean just cooperative. It doesn't mean just directed. It certainly includes the simulated methods we are talking about here. The major purpose of the post-secondary program is to provide initial, refresher, and up-grading education to help individuals enter and advance in an office career. At this level of the educational system, students may be trained as entry office workers and be up-graded to skilled office worker positions. Education may also be provided for entry office technicians positions with up-grading in specialized office occupations. Entry office administrative positions as well as up-grading training leading to administrative management positions can be provided. What more do we want? Here is your total field of office management. You have good management. We haven't put a claim in for top management. After all, Ford has only one president, but they have a heck of a lot of office workers in administrative positions.

Getting the right things at the right place at the right time. This is our job. This is our task. Normally the activities at the post-secondary level include the three types of work experiences I have mentioned before. Normally the post-secondary school is a full-time program. Now the adult program on the other hand tends to be a part-time program supplemental to employment. It has two parts. One of them is supplemental to employment. There is the other part, of course, which is for the few people who want to go full-time in an adult program.

I think that the structure here is the same basically as post-secondary and high school adapted to the people with whom you work. We are finding a greater need, for instance, to work with senior citizens, and I don't care how well-trained she is a 23-year-old chick is not going to talk to a group with the average age 68 and learn them nothin'. Now my English is poor but I think my meaning came through. It's far better in this case to take a 68-year-old person, train them in methods of teaching, and have them talk to this group because this person can get to the audience. The 23-year-old kid can't. The acceptance factor is not there. You must adapt your instructor to the group he is to be teaching.

There is another area. This is the area of youth and adults with special education problems. Office occupations training is based upon need to know. Both the social skills and the behavioral skills necessary to help a person get an advance in office work. To enter the regular program of office occupations education requires certain prerequiste skills without which satisfactory progress in the program is improbable. You can make certain generalizations. For example, the term special needs in office occupations indicates a person who needs to be raised to prerequisite levels. This is the purpose of special needs. This gives you an objective measurement of special needs and keeps you out of the field of sociology which is not an exact science.

There are many areas of office education that a person with mental, physical, emotional, or academic handicaps can satisfactorily perform. In this program there is an emphasis upon gainful employment as well as preparing people to enter the regular office program. I spoke to you before about the desirability of keeping the state supervisor busy. Remember the financial support of office education is basically state and local. There is something almost over $4.00 of state and local money for every $1.00 of federal money that comes into the office program. This is an example of federal concern in education, not federal control. Remember, nationwide this is a state operated program. So keep the heat on your representative who sits in the counsels where decisions are made. He is the one you must look to for leadership.

Now, there is every reason to believe that office occupations will continue to grow as more data about more things are required for making decisions. The office program is the second largest program in the vocational education, but it is the first in wage earning vocational education. We have more people who expect to earn their living through the vocational training in office occupations than any other area. It runs 32% of those who expect to earn their living by enrollment than the office area. Office represents 22% of the total vocational program. This is quite a difference than it was in 1962 when there were 2,000 people in an office occupations program in the nation, and now we have 1.6 million and we are just beginning to get organized. This is the challenge you people are going to face.

The future of office work is very bright. Between 1966 and 1980 it is expected that office work forces will jump from 14.7 million to about 30.7 million. While some 20 million new jobs will be created during this period, 18.2 million of them will be teenage jobs.

Now the parameters of office occupations have been established and the parameters of the larger field of business education have also been determined. Under the direction of Dr. Chismore in the Department of Office Education, a four-year study has developed the taxonomy of education which include definition and structure of all fields of education and administration. The office section of this publication which will be released on the first of September, is 14,000. The business education section is 3,000.

I think it is very important that we think in terms of this office occupations cycle. See Appendix G. First thing we do is to determine what is done on the job.

Let's take a look at office occupations in 1967 based on the reports that I have available from the Office of Education. Office occupations education has helped meet the needs of the economy and defense efforts of the nation for office workers through maintaining, extending, and developing programs of office education for office occupations by assisting the several states as they developed their own programs in this emerging educational area. Again, office education is a state affair. The U.S. Office is interested in helping the state and local community do the job. We are moving rapidly to a more balanced program of office education in terms of educational levels. The secondary school program though still a most important effort is taking less and less priority to the post-secondary adult preparation and supplemental education programs. Education for office occupations is increasingly balanced in serving initial, refresher, and up-grading needs for persons of all ages in all communities. A healthly flexibility is emerging in office occupations as its instructional programs become of sufficient variety to meet the needs of students in meeting the differing abilities in career objectives. Instructional materials are being created locally or on the state level to support the educational classifications of office education. The states are adapting materials from the curriculum guides to fit the patterns of their students and the needs of their community. Specific teacher education programs are developing both with the direction of the state supervisor and through the efforts of business education teacher educators who wish to provide their students with adequate preparation for entry into the field of vocational teaching or at least to give them an acquaintance with the field of vocational education.

Over the nation we find a trend to get away from the use of federal monies for blanket purchase of equipment to support office occupation education. Now the purchases tend to require more specific justification and hence provide a more effective use of federal and state funds.

There is closer relationship between and with office occupations personnel and guidance counselors at local and state and federal level. We are making a real effort here. Program development has moved from the planning to the operational stages in many states. This is one thing we must face.

The facts concerning manpower developments remain much the same this year as they did last year. Office education includes the 12.6 million persons involved in clerical occupations. Seventeen per cent of all the employed in the nation are in this field and also about one in three of the professional and technical classification who perform facilitating functions of the office. This group includes about 4.8% of the work force. So, the field of office occupations involves about 21.8% of the total work force of the nation. It is the largest single labor classification which has any homogeneity at all. It is expected that about 4 million women annually will enter the labor force and that a majority of them will be clerical workers. Over 9 million women find employment in clerical positions on a full-time basis. Over 10.5 million are currently found in office occupations.

There is a substantial improvement of employment of non-white women. This has significance for the nation as a breakthrough in the white collar employment for a major minority group.

The unemployment rate for office workers is 2.9% and consistently this is less than the total unemployment figure for the year 1967 of 3.8%. It is apparent that employment opportunities in office occupations are excellent and that the unemployment is steadily below that of the national unemployment rate.

What about the impact of the office program.

Let me comment a moment about the State of Illinois. In this State, there is considerable impact of office education programs. You find that over one half of the funds which support office occupations come from the Federal Government. In California they spent approximately $3 million on office and distributive programs. Of this, about 60% went to the high school, and 90% of that 60% went into office occupations programs. We're running out of the excuse that we don't have enough money.

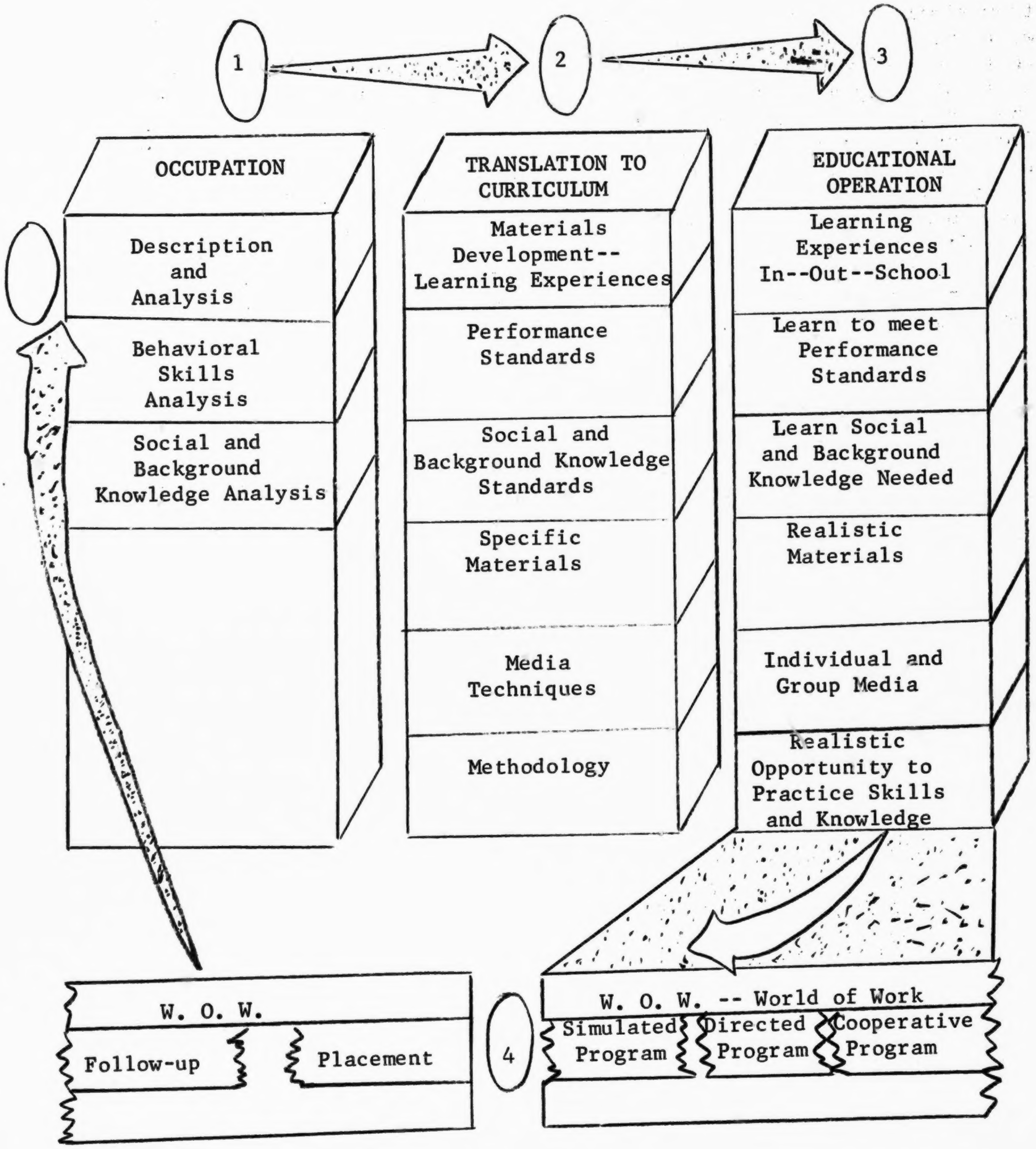
In addition to the amount of federal monies that come into the state, cooperative students who work for wages generate salaries and this is no small amount. In Richmond Va., for instance in one year they made over $112,000.

There are many specifics I would like to talk with you about. In New York, they have an area leader program where they bring department heads together to talk over problems of office occupations. It's been quite successful as far as we can tell. Introduction to data processing for business teachers is the name of a 36 half-hour series of TV instruction offered for teachers of office occupations in Virginia. State colleges have approved college credit for satisfactory completion of this course.

I want to talk about the "Overview of Vocational Office Education" which Dr. Bennion talked about on Wednesday. The divisions of vocational and technical education sponsored, funded, planned, and helped to implement most of the meetings mentioned. In all cases, U.S.O.E. personnel, including office occupations education personnel, were involved in the planning and implementing of the meeting. In many cases, U.S.O.E. personnel served as presenters. It is important to remember that there are about 40 positions open at any one of the schedule meetings. There are 11 or more groupings all of which want to have four or five at the meetings. We are lucky to get more than one person at these meetings and without the office occupations unit this activity probably would have had no representation at the meetings.

Unless we are able to stand up and be counted as something, we will be a generalized nothing. What is needed is the ability to recognize lines of responsibility between services as legally determined and then to cooperate across these lines. But what is everyone's responsiblity is no one's responsibility. I have heard that we are headed for Hell in a handbasket for years. I have grown up with the grace of business education and my career extends vicariously or directly over some 30-35 years. Let us not worship at the altar of the past. The feudal system of interconnected state-sized empires held by the great is passed. It has collapsed. The placid picture of the past is an illusion. The history of business education is full of conflict, and the great have feet of clay as they do today. We should base our activities today on present needs and not the narrow preferences of anointed successes. Above all, we must face the frame of reference in which we must work in today's world. Recently representatives of the AVA, Business Office Education Division, and state supervisors, The National Business Education Association, and some of us who were there were members of all three groups, met in Washington to discuss cooperative efforts. It's too bad that Dr. Binnion was not there because plans for cooperation were made and they were implemented. In summary, this meeting is one of a series of efforts by the Office of Education to improve education for office occupations. There is a defined field for vocational and technical education in office occupations. This definition is found in law and regulation and the taxonomy of education. Office occupations is based on the behavioral needs of individuals in office work and the social skills needed to put the behavioral skills into action. Office occupations covers the spectrum from simple to complex position for all persons and all communities who want, need, and can profit from the instruction. There is a need for acceptance of vocational education moors, philosophy, and procedures or at least resignation to it by business educators. The thing we need more than anything else is mutual communications and recognition that when decisions have been made they must be followed. An attempt on the part of the professional field to override the actions of the Federal Congress is doomed to failure. The thing we need to do is that each of us do the best possible job we can do and cooperate with each other. We must maintain our identity as office occupations personnel. If we lose this, where are we? Our reason for being here is because we are privileged to handle the most precious possession of the nation--our youth, and we dare not give them less than the very best.

APPENDIX G
OFFICE OCCUPATIONS EDUCATION CYCLE


1
2
3
OCCUPATION
Description and Analysis
Behavioral Skills Analysis
Social and Background Knowledge Analysis
TRANSLATION TO CURRICULUM
Materials Development--Learning Experiences
Performance Standards
Social and Background Knowledge Standards
Specific Materials
Media Techniques
Methodology
EDUCATIONAL OPERATION
Learning Experiences In--Out--School
Learn to meet Performance Standards
Learn Social and Background Knowledge Needed
Realistic Materials
Individual and Group Media
Realistic Opportunity to Practice Skills and Knowledge
W. O. W.
Follow-up
Placement
4
W. O. W. -- World of Work
Simulated Program
Directed Program
Cooperative Program

The educational cycle for office occupations starts from an analysis of the occupation and its description in behavioral terms translated into educational procedures, placed into operation in and out of school through planned learning experiences and realistic opportunities to use skills and knowledges, then placement in the world of work, and evaluated on the basis of success on the job.

APPENDIX H

RESOURCES FOR VOCATIONAL-TECHNICAL EDUCATION

The following presentation is a description of the ERIC system in general and the ERIC Clearinghouse for Vocational and Technical Education in particular. It is designed as a script to be used with transparencies made from the included illustrations. Its purpose is to inform the profession about the utility of the ERIC system. The system will change as it develops, beyond these June, 1968 conditions. The illustrations have been deleted from this report but are available from ERIC Headquarters. This Report was given by Dr. Ted W. Ivarie, Head, Department of Business Education, Utah State University, Logan, Utah.

The educational profession has recognized the need for a system of storing and retrieving information. ERIC was established within the U.S. Office of Education to provide such a system. ERIC is the acronym for Educational Resources Information Center. It is a national system for the acquisition, storage, retrieval, and dissemination of information for education.

The ERIC Clearinghouse for Vocational and Technical Education was approved and funded as part of the ERIC system. It is also part of The Center for Vocational and Technical Education, located at The Ohio State University, Columbus, Ohio. At the present time, eighteen clearinghouses are responsible to Central ERIC for the acquisition, storage, retrieval and dissemination of materials in given areas of education. It is likely that other ERIC Clearinghouses will be established as future needs are identified.

Central ERIC is the hub of a group of eighteen clearinghouses. Each Clearinghouse represents separate areas of interest. For example, VT are the letters used by the Vocational-Technical Education Clearinghouse. Each clearinghouse is responsible for a given area. It is responsible for acquiring, processing, and forwarding materials within its scope to Central ERIC for further processing. Documents are abstracted and indexed at the clearinghouses. They are then forwarded to Central ERIC for computer-processing of the abstract, bibliographic information, and descriptors. The original document is then forwarded to the ERIC Document Reproduction Service (EDRS) for filming and processing to microfiche form.

Microfiche is a flat form of microfilm, four by six inches in size. Each microfiche contains images of up to seventy pages of the original document. The microfiche provides a convenient and economical means of storing and transmitting information. It is convenient because many documents may be stored in a small space, any page may be projected to full size on a reader, and any page can be reproduced on a reader-printer. It is economical to the user because individual copies of microfiche sell for twenty-five cents each.

If hard copy is desired, this may be obtained from EDRS for four cents a page. The document can sometimes be obtained from the original source. If so, this is shown at the end of the resume.

Identifying letters, titles, and locations of the ERIC clearinghouses have been developed for identification purposes. For example. AC is the Clearinghouse on Adult and Continuing Education, located at Syracuse University, Syracuse, New York. AL represents the Clearinghouse for Linguistics and the Uncommonly Taught Languages located at Washington, D.C. This list continues to FL, the Clearinghouse on the Teaching of Foreign Languages, located in New York City.

JC represents the Clearinghouse for Junior Colleges. It is located at the University of California, Los Angeles. The list continues through the remainder of the eighteen clearinghouses.

A major product of the ERIC system is the monthly publication, Research in Education. It is the primary vehicle by which information is announced to persons concerned with educational resources. This computer-generated publication of Central ERIC is printed and distributed by the Government Printing Office. It is available by subscription for $11 per year. Each issue of Research in Education contains information on completed research and on-going research. The publication is sometimes called RIE.

Information on completed research is announced in the form of resumes. Each resume contains the abstract and descriptors of a document processed through the ERIC system. In addition, there are several indexes which make it possible to locate information on specific topics or by certain authors.

The information about on-going research is also reported in RIE in the form of resumes of projects as they are funded. These are in the form of abstracts and descriptors so that one may be aware of current research. There are also several indexes to allow one to conduct searches for current research.

The VT-ERIC Clearinghouse is also using publications as the primary means of disseminating information. The two publications currently produced by The Center for Vocational and Technical Education are AIM, and ARM. The two series are produced on a quarterly basis, starting with the Fall 1967 issues. The instructional materials series, AIM, primarily reports instructional materials that have been acquired and processed at the clearinghouse. Research and research-related materials are reported in ARM. Either series is available by subscription from The Center at a cost of $9 annually. Both of these series report vocational and technical education information. There is multiple indexing of the major concepts of the documents announced in each issue, an author index and a document number index.

Processed documents are input to ERIC by the VT Clearinghouse and the other clearinghouses. The materials from all of the clearinghouses are forwarded to Central ERIC and announced in Research in Education on a monthly basis. The outline of another publication, symbolized by the dotted line, represents other publications of Central ERIC. An example would be the ERIC Collection of documents concerning Disadvantaged Youth. Concurrently, the documents processed by the VT-ERIC Clearinghouse are included for announcement in AIM and ARM. The other unnamed publications in this illustration would represent such items as the research review and synthesis series of the VT-ERIC Clearinghouse. There has been a review and synthesis of research in: agricultural education, business and office occupations, distributive education, home economics education, industrial arts education, technical education, and trade and industrial education.

In Research in Education, or in any of the other ERIC publications, the principle means of transmitting information about a document is by the resume. There are four major sections in the resume.

The first consists of the clearinghouse identification number and the ERIC identification number. It is followed by the bibliographic information, the descriptors, and the abstract.

Looking at the first section of the resume, this document is identified as VT 000 453 and also as ED 012 313. The ED 012 313 identification is the number you would use to obtain a copy of this document from the ERIC Document Reproduction Service, frequently referred to as EDRS.

The second section of the resume includes the bibliographic information. Typical information includes the title, the personal author or authors, and the source of the document or the publisher. The publication date in this case is sixty-five representing 1965. On the last line of the second section we see seventeen pages which accounts for all printed pages including the cover. The price for copies of the materials from EDRS is given. The last line in this section is an availability statement and gives you the price for obtaining the microfiche copy or the price of hardcopy from ERIC Document Reproduction Service. Additional information regarding orders from ERIC Document Reproduction Service may be obtained from any recent issue of Research in Education or directly from EDRS.

The third section gives the descriptors assigned to this document for retrieval purposes. The descriptors which identify the concepts in the document are: industrial education, technical education, vocational education, curriculum planning, teacher education, and in-service teacher education. The descriptors with the asterisk represent the major concepts of this document. These terms are used in the index of an ERIC publication reporting this document.

The final section is an abstract section. It provides an abstract of approximately 200 words to describe the content of this document. If there is a publishing source which sells this document, this information is included at the end of the abstract. Whenever a hardcopy is desired, be sure to check this source. The source cost will be less than the EDRS hardcopy. EDRS hardcopy is a back-up resource when copies of the original document are out of print or are no longer available.

Some resumes have a VT number only and no ED designation. This document would not be included in Research in Education. It would be announced with the other documents in an issue of Abstracts of Research and Related Materials in Vocational and Technical Education (ARM).

One might visualize the ERIC system as a cycle.

Several users forward information to the VT Clearinghouse. Documents received and processed by the clearinghouse are announced in AIM and ARM. They would be available to the user in the appropriate microfiche collections. Many of the same materials would be forwarded to Central ERIC where they would be announced in Research in Education. If so, they would be available as individual documents on microfiche or as hardcopy from EDRS. Microfiche of the items in AIM or ARM without the ED designation may also be obtained from EDRS, but not as individual documents. The materials announced in AIM and ARM will be continuously filmed and placed on microfiche under a single ED number. This permits anyone to obtain the microfiche collection for any single issue of AIM or ARM from EDRS.

In some states certain agencies will obtain these collections and the equipment to reproduce microfiche or hardcopy of individual documents. Research Coordinating Units are interested in providing this service; however, this capability has not been fully developed at this time. Several indexes to the materials are also included in each microfiche collection. There is sometimes some connection between ARM and EDRS when documents from a single issue of ARM are input under one ED number. AIM would be treated in the same manner. Items being input from Central ERIC receive an individual ED number for each document.

The future value and utility of the ERIC system will be dependent upon the flow of materials into the system. This input of materials must come from the individual members of the educational community.

Collection procedures are important in this kind of organization. Two copies of research or research-related materials which may have some impact on vocational and technical education are solicited. Examples of the types of materials desired are: instructional materials, research reports, conference reports, bibliographies, and so forth. Any person who has copies of these types of materials or who is involved in the production of materials pertaining to vocational and technical education should forward two copies of each document to the ERIC Clearinghouse for Vocational and Technical Education. The materials should be directed to the attention of the Acquisitions Specialist at the ERIC Clearinghouse, Columbus, Ohio. The resultant products include Abstracts of Research and Related Materials in Vocational and Technical Education, or Abstracts of Instructional Materials in Vocational and Technical Education, synthesis and review papers on selected topics, microfiche or hardcopy or individual documents, and bibliographies.

APPENDIX I

SAMPLE PROCEDURES MANUAL

Executive Secretary Procedures

Transcribing Dictation

As an executive secretary, if you are assigned the work of transcribing dictated material from a machine, you will have many of the same problems that are encountered by the stenographer who transcribes from shorthand notes. The chief difference is that as a machine operator, you must depend upon your hearing. You have the advantage of being able to check the accuracy of your typing and the arrangement of your letters as you transcribe, while the stenographer must devote much of her attention to the reading of her shorthand notes as she transcribes.

At first, transcription is usually performed by starting the machine, listening for a few words--a phrase, or a sentence--stopping the machine, typing the words, starting the machine again, listening for a few more words, and so on until each letter (or other material dictated) has been transcribed.

As proficiency is increased, you should be able to type more or less continuously. It is then usually unnecessary to stop and start the transcribing machine to pick up lost words or phrases. If dictation is not too rapid, it may be possible to type along with the voice. It is more important, however, that you learn to stop and start the machine without pausing in typing.

Materials needed:

1. Dictating machine
2. Dictation belt
3. Indication slip

Procedures:

1. Listen to the corrections and special instructions before transcribing any of the letters, memorandums, or other matter.

2. Use the indication slip as a guide for the proper placement of material.

3. Be sure that you understand the meaning of the dictation before typing so that you will avoid errors in grammar, in punctuation, in spelling, and confusion of homonyms, such as bare for bear.

4. Develop the power to carry dictation in your mind in order to avoid the overuse of the repeat key.

5. Develop the pattern of the expert machine transcriber--keep the typewriter moving, but stop the dictating machine. Listen to one phrase ahead of your typing.

6. Use parts of the typewriter to advantage, especially the tabular key and variable line spacer.

7. Avoid errors in syllabication; e.g., dividing the last word in a paragraph.

8. Proofread as you type your material; reread after finishing a paper.

Taking Dictation

Whether the boss dictates only once each day or periodically throughout the day, it is the responsibility of the secretary to be prepared to answer immediately a request for taking dictation. You may be summoned to your boss's desk either by direct oral call if your desk is nearby or by interoffice telephone.

You should have on your desk, in an easily accessible place, a notebook and pen and pencils. As soon as you acknowledge his call, you should take your notebook and writing tools for dication and go into his office. Possibly, the call will not be for dictation; however, you may find it helpful to make notes of any instructions or directions that your boss might wish to give you.

Does this mean that you must leave important work in your typewriter or on your desk? Your first responsibility is to answer the call. If you are in the process of doing a task that must be completed shortly, you can tactfully mention this to your employer and let him decide whether his need to dictate should take priority over what you are doing.

When you leave your desk, you must remember to take care of any confidential material that might be on your desk (e.g., salary information, etc.).

Material needed:

1. Notepad
2. Pen or sharpened pencils

Procedures:

1. If there are any special instructions that are important to you before you begin transcribing, these should be written in shorthand in sufficient detail to be understandable when you get back to your desk. Many secretaries use only the left column of the shorthand pad for taking dictation so that the right column is free for recording instructions, as well as corrections, that the executive may make as he progresses through the dication.

2. When the dictator pauses to collect his thoughts, you should take advantage of such free moments. At such times you can read notes, insert necessary punctuation marks, correct poor outlines, make longhand notes where necessary, or insert symbols to signify words which must be checked for meaning or spelling.

3. If a word, sentence, or paragraph is to be deleted, you should merely draw a line through the notes and begin the correction after the part deleted. If additions are made after the letter has been dictated, you should place an encircled "A" at the point in your notes where the insert is to be typed when a transcript is to be prepared. Another encircled "A" should appear at the beginning of the insert, wherever it appears, and a double encircled "A" at the end of that insert. For a second addition, a "B" can be used, and so on.

4. The kind of dictation will determine, in part, the details involved. For instance, if a letter is involved, the dictator will often begin with the salutation and expect the secretary to locate the address of the recipient. Reports often require several drafts. The dictator may prepare a first draft by dictating it to his secretary. At this point, he may not have the complete report clearly in mind and there may be gaps in the material. The secretary should not become disturbed by this. She will know that when she types the first draft and fires it to her boss, he will be able to fill in the gaps and refine the message he is trying to write.

Trip Arrangements

Often a secretary will be called upon to make arrangements for travel and accommodations for her boss when he is going somewhere. These requests should be honored as soon as possible since quite often airline or other type reservations are booked up months in advance due to unusual circumstances such as a large convention taking place in a city.

Materials needed:

1. Trip planning form
2. Flight schedule book

Procedures:

1. Using the trip planning information as a guide, query your boss on the following points:

Trip destination
Date of visit
Desired time of arrival and departure
Requirement for car rental
Requirements for accommodations

2. Referencing the flight schedule book, determine which flights most closely meet the boss's requirements for arrival and departure.

3. Call the airline(s) concerned and tentatively make arrangements for the times coinciding closest with his wishes, and make any other arrangements for hotel/motel or car reservations, etc., required by him.

4. Type an itinerary of his trip and present it to him for approval.

5. If he wants any changes made to the plans you have, call the airline concerned and revise the plans accordingly.

6. Await confirmation of the reservations made; when these are received for all accommodations, inform your boss so that he is assured all plans are firm.

Load Balancing of Office Work

Often the work-load in various areas of the office may become too much for the position(s) involved; however, in other areas of the office load may be extremely light. An efficient Executive Secretary is usually aware of these conditions through normal contacts with the girls, or she becomes aware of these conditions when a situation warrants a redistribution of the work-load.

Materials needed:

1. None

Procedures:

1. Distribute the excess work to a position at which it can be handled.

2. If no position can handle the excess work, hold onto it until it can be handled, meanwhile informing the boss.

Debriefing: Log Maintenance

Whenever a debriefing session is called by the Instructor, it is the responsibility of the Executive Secretary to note the problems that are raised in these sessions and the various solutions that are offered or adopted for use. These notes are to be given to the Instructor following any such session.

Materials needed:

1. Notepad and pencil

Procedures:

1. Note all problems raised by the group.

2. Note all solutions offered and/or adopted by the group.

APPENDIX J

EDUCATIONAL TECHNOLOGY

Dr. Harry Silberman
System Development Corporation
Santa Monica, California
July 17, 1968 7:00 p.m.

Introduction:

Dr. Silberman in the manager of the Education Systems Department in the Public Systems Division of System Development Corporation, Santa Monica, California. He is responsible for all education work. Since joining SDC in 1956, he has concentrated on problems in developing instructional materials for reading and mathematics instruction and has conducted numerous research studies on the effectiveness of computer-based instruction. He has recently been concerned with integrated applications of computer time-sharing, to problems of instruction, counseling, and school administration. He has taught and served as a consultant of education technology for school districts, various universities, and professional organizations. Dr. Silberman received a BA degree in Biology and an MA degree in Psychology in 1950 at Chico State Collete in California, and in 1955, he was awarded his Ed D degree from the University of California at Los Angeles. He is a fellow of the American Psychological Association, the American Association for the Advancement of Science, and the American Educational Research Association and served on several committees in these organizations. Dr. Silberman has published numerous articles in psychological and educational professional journals. I think you'll like him a lot.

Dr. Silberman:

One of the things I would like to do is to tell you what we are doing at SDC in the area of educational technology. In some ways I'm more informed about that than anything else, but I'll save that until last. Another thing I can do is talk about simulation, which I really haven't had much to do with in such a long time. But nevertheless, I have some strong opinions about it, but before I express them let me give you a few examples of some applications of simulation training that you may not have heard about already. They might be of some interest to you. One example that is kind of interesting is something that is being done in New York with the Board of Cooperative Educational Services, that's New York State Education Department. They have been playing around with using a computer to simulate the economic system of the Samarian Empire. They get fourth through sixth grade kids to act as if they are prime ministers of this empire. These students are given problems of making decisions about how much of the grain that the empire has should be eaten, how much of it should be planted, and how much of it should be saved.

They make these decisions and their decisions are inserted into a computer. The computer runs through some economic equations of this varying society and makes a report that comes right back and the students are notified of the consequences of their decision. Now the object of course, isn't to teach them to plant a certain amount of the seed, or to eat a certain amount of the grain. The real object is to teach them about the consequences that are contingent on the kinds of decisions they make.

When they finish playing prime minister of the empire, the kids are then put into a simulation training position where they are supposed to be running a plant where they manufacture surfboards and they have simulated decisions. Not only decisions as to allocation of natural resources, but also decisions related to personnel and such. And they get some feedback that is designed to teach them about some of the principles of economy association with manufacturing concerns.

The next simulation they are given is a retail business operation. They are given a toy store to operate. They decide how much money they want to spend on advertising, how much money on various functions and they are given knowledgeable results, consequence information that is designed to teach them something about economic principles. The significance of all this is that this is one of the few simulation programs that has been actually exposed to evaluation. The investigators compared the simulation of the empire with a conventionally taught classroom in which the economic principles were taught. There was no significant difference in learning as far as that goes in the conventionally taught classroom, other than the children who were participating in the simulation exercised.

Although, when you look at factors of motivation and attitude, the kids who have been participating in the simulation exercises seemed to be more excited about what they were doing.

There have been some classroom simulation for teaching teachers how to teach. This is being done up at Oregon associated with teaching research. They made a series of film clips. These film clips show a conventional classroom and at various points in the sequence of the film, the film stops and the student teacher is asked to make a decision about what he would do next. You'll have a film clip where the bell rings and the kids start coming into the room and one kid starts pushing another kid, just a little bit, sort of a playful nudge, you know, and then they stop the film and they ask the teacher, "Now what would you do?" Would you call that particular person up to the front of the room and make an issue out of it and reprimand him or would you initiate proceedings to suspend him from school, or would you just ignore the whole thing or would you give him a look. You have a series of alternatives that a teacher might do in that situation. The student makes a choice, and as a function of the choice he makes, the film strip will go on.

The idea here is not to teach the student-teacher sepecifically what to do in a given situation, but rather to establish a sensitivity to the possibility of what might happen depending on the decision that is made. You need to estimate the consequences of different types of decisions. Here again, there was a comparison of how much was learned by the students as taught via this simulation classroom technique in constrast to a group who were doing the traditional training program. And as far as concepts were concerned there was no appreciable difference but what did come out is that the kids that participated in the simulation training felt more at ease when they first went into the classroom during their practice teaching. Here again, when you look at the hard data, all the great things that are happening in simulation have to be taken with a grain of salt.

Another example of the different kinds of simulation; IBM and now the University of Texas have been playing around with using computer system instruction in a chemistry laboratory. They have slides which show test tubes that contain chemicals. And the student sits at the typewriter and he is asked to identify an unknown chemical in a test tube. He has a long list of things that you can do in the laboratory. For example, No. 6 is wash the test tube and he pushes this button and the next slide is, of course, a clean test tube. Then he might add a little bit of sulfuric acid to the agent and he pushes 8, and immediately he sees smoke coming from the test tube, and the next button he might choose is start with a new sample of the chemical.

There is an interesting thing that goes on in this kind of simulation training. First of all if you watch what happens in a high school chemistry class, most of the time the student is scrubbing test tubes and dropping things and finding things and doing all sorts of things that have no relevance whatever to teaching the concepts of chemistry. Most of them have to do with housekeeping. Simulation avoids a lot of that and the students are able to see very quickly the consequences involved in the decision he makes. In addition to this, you have a record of all the steps he took before he solves his problem. So simulated chemistry laboratories are something that have been used recently.

There is an interesting simulation training going on at USC. They have a dummy who responds physiologically to drugs. When anesthetics are applied, the dummy reacts as a normal person would react. This is an effective use of simulation because it takes out some of the hazards of training anesthesiologists.

You have heard of simulation games that are used to train school administrators. Back at ETS and NYU they have a series of scripts that the school superintendent is most likely to encounter in the course of the day. Actually they compress time which is an advantage of simulation. During the exercise the administrator is required to put out all sorts of fires and in some cases the decisions that he makes are fed back to him and he learns that there are certain ways of behaving especially in crisis periods that are simply inappropriate like making a decision too quickly without getting all the information.

There are other kinds of simulation training; for example there is a package in which you have $2 billion and you are in a position of deciding how to spend it on education. You decide what proportion should be spent on teachers' salaries, what proportion should be spent on capital outlay, plant maintenance, plant operations, what percentage on simulation materials, what percentage should be spent on bus transportation, what percentage for special education and for culturally disadvantaged children. You make all these decisions and you get feed back about some of the consequences.

Even though training is a very useful way of using simulation, probably an even more useful procedure is to try to find out whether the procedures are going to work before you implement them.

Let me jump over to the topic of classification schemes of simulation laboratories. At SDC we have all different kinds of simulation laboratories, and I'm sure Chuck Bustya has told you about some of these simulation laboratories. Let me tell you a little about the different kinds of laboratories. The kind of simulation most people do is called manual simulation. That is, you take things off the shelf, typewriters, calculators, telephones, and you make up some scripts and you assign some positions to simulators; you call in messages, and people have to talk to one another. It is very adaptable because in a very short time you can completely redesign the whole simulation plan. But you don't get very good measurement of the results.

There is a problem of manual mechanics here. You might have runners who carry messages from one position to another in this type of simulation. Oftentimes the manual procedures themselves influence the simulation and they are more important than what you are trying to teach in the simulation itself. By in large, manual simulation is here to stay.

Then there is special purpose simulation facilities where you use equipment that is specially designed to perform certain functions. For example, in our systems training program at SDC, we built a machine that would generate a target stimulus that looks on a radar screen exactly as if it were an immense craft in the air. You could hardly tell the difference. These special purpose simulation laboratories aren't very flexible. Once you have designed and built and spent the money for that equipment, you are kind of stuck with it.

Then there is the computer based laboratory. This is very expensive to use, even though it is highly flexible. The advantage of using the computer, as part of a simulation exercise is that it has very good measurement procedures. You can measure what people say to one another; you can measure every communication that has transpired. The computer can analyze that data and tell you all sorts of interesting things about what happened after. The problem is the expense.

A final kind of simulation laboratory that we have worked with is called time-sharing. If you dedicate a computer just for that simulation exercise, that function is going to have to support the whole computer. With time-sharing at the same time you are using the computer for simulation, you can also be using the computer to run the payroll, or apply several other important jobs so you can share the cost, and the total cost of the simulation comes down.

These different kinds of simulation laboratories have different advantages and disadvantages. When you look at a simulation facility like this one, there are certain capabilities that you look at. And first of all you look at how is the stimulus generated. Is it a static stimulus or is it dynamic and by that I mean one way to go about building a simulation package is to pre-program everything. Another way is to design it so that depending upon what people do, they'll see different things, they'll get different messages as a function of the way they respond to the simulated situation.

Another thing you want to look for when you look at a simulation lab is where are the capabilities for monitoring the student's response. There are some facilities that make periodic checks on what is happening, others make periodic checks, and there are some systems that will give you a continuous measure of what's happening in the simulation and different types of measurements.

Another item you look for when you look for a simulation package is what is the response network. Does everybody respond in unison? Can people move along different routes, or can they take different paths? Can people talk to one another, and depending what they do the whole simulation picture changes. You have this continum then from a very structured simple-minded simulation to a highly dynamic interractive complex network.

The other question you might ask is to what extent is a simulation exercise controlled by the student and to what extent is it controlled by the designer of the simulation. In some cases the students have very little control. He merely responds to a series of events and in other cases he directs the program himself.

Finally there is the flange presentation from narrow to very wide and open-ended. So I will just give you some anchor points that might allow you to look at a large variety of simulation systems and try to locate or classify them. We have found that when we started our simulation training many years ago, we first used the computer to generate the actual material that the student responded to and we found that was very inflexible. It was quicker to make up a quick picture and let the student look at it and put it up in front of a closed circuit TV and let the people respond to that kind of a stimulus that actually programs the computer to generate the visual stimulus or whatever it was. Now we use the computer more to monitor the performance to keep track of who talked to whom and who made what decision. We use it to collectively analyze data, and we use manual data for generating the physical stimuli. In fact, we feel now that the optimal combination is where you have a semi-manual computer based lab in which you have an adoptable stimulus generation but more expensive precise measuring tools to give your data anlaysis. That's what the people who are serious about making a science of simulation are concerned with.

Problems in Simulation Training

One of the problems is you have to decide how realistic should the simulation be. There are studies in the literature that you can look at. Some of the old studies indicated that the more realistic the better, and then a man came along and showed that with certain tasks, and by using less realism and by simplifying the situation you can produce much more efficient learning. So we seem to have a paradox here. The way I resolve this is in the final result is to produce a very realistic situation in which the students can respond appropriately. You may start at a much simpler stage, that is you may start out with a situation that only resembles the situation and is highly simplified, and as the student becomes more and more able, you make the simulation more and more realistic so there is a transition from an extremely simplified setting to a more complex setting.

The other problem in simulation training is the problem of evaluation. It's easier to simulate than it is to produce a change in student behavior. By that I mean that you can lump up a simulation in an office where you want the student to be performing and you can get him to respond and he will be very happy about participating in this exercise. But unless you have some specified education objective and you know what you want him to be able to do when he finishes, you're going to end up with a good experience but not really knowing whether you have really accomplished anything.

I submit the 90% of simulation training work that has been done in the country has been done without any notion of what the specific behavioral objectives that were trying to be achieved might have been, and that with no attempt at modifying the simulation until you successfully produce the learning you were trying to obtain. It is almost characteristic that the bulk of the effort that goes into that first draft, the first run, you put all the effort into that first copy and then you say good, I'm done. You go through it and you run it off, but it's a different story when you say that "I will guarantee that these students who have worked in the simulation can now function down town in the mortgage and loan company and that they will be ranked as No. 2 employees within a given period of time.

That sort of turns the key a little bit and makes a much tougher criterion to meet and yet that to me is what's needed. For example, in this simulation of a classroom, if I was training a teacher what would be the criterion that I would be trying to get in that classroom simulation exercise? I'm showing these film clips to those student teachers and I'm getting them to make decisions and I'm hoping that they will be "better teachers." What's my criterion there? Student Learning. Before you can say that the simulation was effective you will have to demonstrate, you see, that student-teachers who have been exposed to that kind of situation can indeed subsequently produce learning in the students in their classrooms. It's hard criterion to meet.

What usually happens is that you run the simulation and you see one thing and the student who has been exposed to the simulation sees another thing. He's in there and he's responding and you think, "boy look at how excited they are. They're responding. They're talking, and they're really getting a good rich, yeasty learning experience. But then when you say okay, now let's evaluate, you construct some kind of a problem situation and you expose the same student to the problem situation, they may not be able to perform. So what do you do then? You analyze where they're falling down in their performance and you say now, "what part of that performance, where in our simulation are we trying to stress that function. So you go back and you look at your simulation exercise and you see how you can change it. You get together with your colleagues and maybe you go off and contemplate by yourself and finally you get this big flash. Something hits and you get the idea that you know what you did wrong. You go back and you change your simulation and you give your examination again and what happens instead of getting better, they are worse than they were last time. Now you're in to this about 6 months and you're not making much progress. It is extremely difficult to build a simulation exercise that acutally changes the students. It is easy to build a simulation and get it to run, but what we need to look at now is that it is not good enough just to get that first draft. You have to get something to the point where it actually works.

That's the message that I think is very difficult to get across for a number of reasons. For one reason, it takes too long. And for another reason, when you start feeling that way, when you get your very best ideas on the line and you try them out and they don't work you begin to look for other ways of solving the problem. Administrative arrangements--things like let's get some new equipment, or let's get someone else to do the instruction, or let's have instruction in a different place. All kinds of administrative solutions that are cover-ups. They don't really solve the problem. I think they really evade the question and make it difficult to find the real solution. They give the impression as though you are doing some good.

There is another reason why I don't think we do this very often besides the fact that it takes too long and it is too easy to come up with the secret weapon--the administrative solution. Also because once you start analyzing this behavior and looking very closely, you find out that rather than dealing with complex conceptual decision making behavior, you're dealing with very elementary kinds of sub-skills, when you look at it closely. Those are the things that make gaps in the repertoire in some of these students and are preventing them from going ahead and benefiting from the simulation. You somehow have to plug these gaps, and that means that you have to tinker with things that look to be fairly unglamorous and mundane, in other words you take a lot of the mystery out and you start cutting through the intuitive process in getting down to the nuts and bolts and that takes a lot of fun out too. Of course, there is the fear that you are becoming too technological. You are trying to emphasize hardware. The idea of simulation training is this--it is very old; you can find examples of it way back, but building a technology hasn't been done and it hasn't been done because of these reasons. It is very hard. What I mean by technology is to build a package with several procedures that are very explosive so that somebody else can take what you have built and he can use it. The advantage of an exploitable package is that it can be improved upon and modified and expanded and it can be distributed widely, mass produced.

I might say something else here too. You are all going back to your states and you are going to have your little package, and you're going to get everybody else all excited about it. But, recognize this, there is a certain predictable cycle and I think this cycle starts with an initial enthusiasm when the potential of this new technique becomes apparent. After you get your quick exhilleration of enthusiasm, then what? Then someone tries it and it flops. The enthusiasm kind of dips off and you realize that the technology doesn't deliver on the promise. Your students drop down below the level from which they started. There are always a few souls who have the courage and the conviction that the idea is still worthwhile and they stay with it long enough to work out some of the kinks and they finally get something that is integrated into their regular teaching repertoire. That begins to build up and that is what we are really shooting for.

There are very good reasons why it is so hard to get technology accepted, and some of the reasons may not be very pretty. Things like what's the role of the teacher and what's the effect of when you try to say individualize instruction on the disparities in our society. These are very serious considerations I think about thinking of doing something new.

Let me tell you a little about what we're doing at SDC. Bear with me I sort of realize that I'll be rambling. At SDC we have in our education department a series of projects, and each project we are working on because we were successful in getting them funded, and things we were interested in doing also.

One project we are working on is the development of an instructional management system. When you evaluate and revise an instructional sequence whether it is a simulated sequence or a regular textbook, you can get something that works pretty in the laboratory. Then you send it out to a classroom to someone who hasn't seen it before and you say go ahead and follow the teacher's guide and of course you know what happens when that takes place. Everything that could be done is done wrong. And as a result, your beautiful instructional package doesn't work. One of the things that we noticed is that the teacher who will continue to run the classroom situation has to answer all sorts of questions, make all sorts of kinds of instructions and decisions and most of these decisions are made on the basis of very limited evidence. For instance, how fast should you pace your students through the semester? Should you form groups and who should be in those groups, etc. Usually these decisions get made badly simply because that person hasn't got that kind of experience of having worked with those materials over the years. We're trying to build a system that will provide the teacher with some information with which to base these instructional decisions.

We are revising this system because it hasn't been very effective for a number of reasons as far as our standards are concerned. One reason is that the teacher mainly doesn't follow the prescriptions we give them. If they don't do this we don't get the learning, but that doesn't get us off the hook. We have to say okay, how can we redesign the system so that the teachers do follow. One way maybe is to give the materials to the principal. Another reason is that sometimes the teachers give the prescription and they'll change. The kids don't learn. So pretty soon the teacher will ignore the material and just give any old material. In other cases we give a prescription that is well checked out independently, but the diagnosis is wrong.

There is another thing we are doing using the same set of computer programs. It is designed to help the school superintendent. We have been running this for about a year. The budget planning system gives the superintendent the opportunity to explore the alternative by means of making computer simulation with the consequences of making various manipulations on his personnel data base. This means he has a teletype located at the district office and it communicates with a telephone line. He can ask all kinds of questions like "How many teachers are ready for retirement next summer?" He types that in and right back comes the number of teachers.

The school superintendent who we have been working with in comparing his work this year with previous years does a number of different things. One, he explores a much wider range of possible changes prior to making firm budget decisions. He becomes a better decision maker. Another thing that has come out during our year of working with him is that all kinds of operational problems that he wasn't even aware of have been coming out. This school's administrator was solving the same problems over and over using the same time. He had forgotten the school's policy.

Another project that we are working on. One of the hidden resources in every classroom is commonly ignored is the kids themselves. We have been working with a Mexican-American population in East Los Angeles, trying to get through to some of these kids who have quite a bit of difficulty in certain areas. For example, children who come from bilingual homes come into the first grade and they don't comprehend the direction words like prepositions top, bottom, left, middle, etc. So we decided that we're going to focus on teaching those direction words. We developed a system that takes different kinds of tutoring strategies that depend on the severity of the learning problem which one we use. For example, if it is a simple problem we may use one child in the first grade to help another child in the first grade. We designed materials that are designed to teach the tutor what to do. We have other materials that are used in the tutorial interchange. Now if the learning problem is a little more difficult, we use older children to come down and help the first grader. They're given a little more freedom because they're smarter and they can anticipate things, but they still play by a fairly structured set of rules. If the problem is more difficult, we hire people to come in from the community to communicate with the children. They know the language and such, and they go into the home and get somebody who is older in the family who is willing to help the child. This may not be a mother; it might be an aunt or an uncle or brother or somebody who is most appropriate in the home who has the time and the ability. Now if the difficulty is more severe, the teacher does the tutoring personally. Even then we have special materials for her to do the tutoring. One of the things that we have found here is that there are benefits to the tutor as well as to the tutee. These benefits aren't always cognizant. In many cases they are abstractive. We have some anecdotes about older children's change in behavior who have helped younger children. They get "more intersted" in studies. They behave in a more mature fashion, toward their teachers. We're planning now to expand that effort and to take an entire school starting with the kindergarten and move up to the first grade and over a 7-year period develop a whole tutorial community in which everybody helps everybody else. It's an exciting concept but it's very difficult. It's hard to keep under control. The logistics get to be so complex, but by keeping it simple we have been very successful.

Another project we were working on is trying to help the poor counselor. The high school counselor, by in large, doesn't do any counseling today. Mostly he does clerical work. His job is to get the schedule ready, etc. He really does very little counseling in helping kids find out who they are, to do their educational planning, to try to figure out what skills, or occupations he might be moving toward, what his philosophy of life is--those kinds of things that counselors are trained to do. We have been working with junior high school, senior high school, and junior college complex and trying to develop man-machine counseling system and we have formulated a computer program we are now writing that we expect to implement the end of this year. It will do some things like information getting and giving. It will keep track of students--the sub-human work. Most of this work can be done by machine. I think that one of the unique features of this particular project is not that we're getting the computer to do some of the clerical parts of the counselor's job but we've learned that when we start doing that the counselor, rather than using his free time to become a better counselor, becomes more of a data mechanic than he ever was before.

I have given you a quick and dirty overview of what we are doing at SDC and would be happy to entertain comments and suggestions and questions from you.

APPENDIX K

PRACTICUM QUESTIONNAIRE

PARTICIPANT'S NAME____

HOME ADDRESS____

Home Phone____________ City_____________ State__________ Zip______

SCHOOL NAME____

SCHOOL ADDRESS____

School Phone__________ City_____________ State__________ Zip______

1. Yes___ No___ Are you currently using simulation in your district? If not, why?

2. Yes___ No___ Will you be using simulation in your district next year? If not, why?

3. Yes___ No___ Are you aware of any other schools in your state using simulation because of your practicum experience? If yes, list schools and teachers.

4. Yes___ No___ Do you think simulation is an effective teaching method?

5. Yes___ No___ Have vocational funds been made available to support simulation programs.

6. Yes___ No___ Did the practicum provide you with practical knowledge concerning simulation as a teaching technique?

7. Yes___ No___ Did the practicum provide you with experience necessary to design a simulation for your own use?

8. Yes___ No___ Did the practicum provide you with materials necessary to design a simulation?

9. Yes___ No___ Should another practicum for simulation methods be sponsored by the U.S. Office of Education for practicing teachers?

10. Yes___ No___ Have your practicum presentations (group or individually) had a visible effect on office occupations programs in your state?

11. How would you describe the reaction of your state office occupations leaders to simulation?

enthusiastic___ very interested___ passive___ not interested___

opposed___ unaware___

12. Rank in order of importance (1 through 5) the level of supervisory personnel who could benefit most from a similar practicum.

_____District Supervisor
_____State Supervisor
_____Principal
_____Vocational Counselor
_____Department Head

13. Rank (1 through 7) the following teaching methods in order of effectiveness in reaching office occupations objectives, in relation to your classroom experiences.

_____cooperative
_____simulation
_____directed
_____office practice
_____intensified
_____traditional 1-hour block classes
_____2-hour blocks of advanced business classes

14. How well does simulation fit into your present business curriculum?

_____extremely well
_____satisfactorily
_____it does with effort
_____poorly
_____very difficult
_____not at all

15. How many students have directly benefited by using your simulation program?

_____(record the number of students in the classes using simulation)

_____did not have simulation

16. What group presentations have you made to disseminate practicum information?

		Name of Meeting	Date	Place	Number in Attendance
Presentations for teachers	1.				
	2.				
	3.				
Presentations for school administrators	1.				
	2.				
	3.				
Presentations for business people	1.				
	2.				
	3.				
Presentations for parents and students	1.				
	2.				
	3.				
Other Presentations	1.				
	2.				
	3.				

17. Considering the school year which has now passed since the practicum, state what kind of effect the practicum has had in your professional experience:

APPENDIX L

PRESENTATIONS MADE TO DISSEMINATE PRACTICUM INFORMATION

Number of Presentations	City and State of Presentations	Number in Attendance
2	Anchorage, Alaksa	7
	Fairbanks, Alaska	7
2	Hanford, California	75
	Sacramento, California	250
2	Arvada, Colorado	1
	Arvada, Colorado	1
1	Newark, Deleware	3
5	Washington, D. C.	52
	Washington, D. C.	5
	Washington, D. C.	4
	Washington, D. C.	4
	Washington, D. C.	13
1	Fort Lauderdale, Florida	12
4	Boise, Idaho	50
	Driggs, Idaho	15
	Driggs, Idaho	3
	Driggs, Idaho	13
1	Edwardsville, Illinois	30
1	Gary, Indiana	100
2	Des Moines, Iowa	70
	Des Moines, Iowa	18
4	Bowling Green, Kentucky	10
	Georgetown, Kentucky	70
	Georgetown, Kentucky	15
	Georgetown, Kentucky	10
2	Morehead, Kentucky	200
	Morehead, Kentucky	8
5	Metairie, Louisiana	30
	Metairie, Louisiana	15
	Metairie, Louisiana	10
	New Orleans, Louisiana	100
	Shreveport, Louisiana	100
1	Portland, Maine	13
4	Baltimore Maryland	150
	Parkville, Maryland	20
	Reisterstown, Maryland	4
	Westminster, Maryland	30
2	Salem, Massachusetts	22
	Hudson, New Hampshire	4
3	Lansing, Michigan	12
	Sexton, Michigan	7
	Sexton, Michigan	40
1	Columbia, Missouri	200
1	Great Falls, Montana	10

PRESENTATIONS MADE TO DISSEMINATE PRACTICUM INFORMATION--Continued

Number of Presentations	City and State of Presentations	Number in Attendance
4	Kearney, Nebraska	50
	Syracuse, Nebraska	5
	Syracuse, Nebraska	30
	Syracuse, Nebraska	7
1	Albany, New York	10
1	Las Vegas, Nevada	40
3	Chapel Hill, North Carolina	200
	Mt. Airy, North Carolina	8
	Mt. Airy, North Carolina	7
6	Albany, Oregon	2
	Albany, Oregon	5
	Albany, Oregon	25
	Albany, Oregon	25
	Albany, Oregon	30
	Portland, Oregon	50
1	Lancaster, Pennsylvania	100
4	Pierre, South Dakota	25
	Sioux Falls, South Dakota	7
	Sioux Falls, South Dakota	30
	Watertown, South Dakota	10
3	Oak Ridge, Tennessee	8
	Oak Ridge, Tennessee	2
	Oak Ridge, Tennessee	2
2	Houston, Texas	300
	Houston, Texas	42
2	Salt Lake City, Utah	150
	Salt Lake City, Utah	150
2	Tacoma, Washington	10
	Tacoma, Washington	7
4	Charleston, West Virginia	20
	Charleston, West Virginia	30
	Charleston, West Virginia	18
	Charleston, West Virginia	50
5	La Crosse, Wisconsin	13
	La Crosse, Wisconsin	24
	La Crosse, Wisconsin	15
	La Crosse, Wisconsin	15
	Milwaukee, Wisconsin	35
5	Milwaukee, Wisconsin	90
	Milwaukee, Wisconsin	35
	Milwaukee, Wisconsin	30
	Milwaukee, Wisconsin	9
	Milwaukee, Wisconsin	50
TOTAL 87		3,484

APPENDIX M

PRACTICUM PUBLICITY MATERIAL

The following items are excerpts taken from articles that appeared in different media concerning the Practicum. They were taken from articles in different states.

Herald Journal, Logan, Utah

Practicum for Simulated Methods in Office Occupations Education, July 8-19, will train 36 high school teachers of office education programs from all over the country. Garth A. Hanson, assistant professor of business education and office administration, will direct the course.

Thirty-six high school teachers from 34 states are playing the roles of cashiers, executive secretaries, vice-presidents and tax clerks at Utah State University this week. They're participating in the Practicum of Simulated Methods in Office Occupations Education, a two-week workshop.

Purpose of this workshop, the first of its kind in the nation, is to acquaint high school office education teachers with the method of simulation instruction.

Garth A. Hanson, assistant professor of business education and office administration at USU, explained it this way: "The objective is to simulate an office through the use of a simulator, who acts as the outside world. The simulator may be an irate customer, someone applying for a loan or a person needing an insurance policy."

The complaint, loan or insurance application then goes through the procedures in the classroom office that it would undergo in a "real" office.

The simulated office hopefully will prepare the student to walk into an office as an employee and feel familiar with the situation. What each student does in the simulated office depends on other students.

For the workshop, USU has set up two six-man offices modeled after the Utah Mortgage Loan Corporation office in Logan with a vice president, executive secretary, cashier, posting and tax clerk, insurance clerk, and receptionist.

The teachers participating in the workshop have worked in both offices and the mobile office education unit (MOE) where they have received instructions on developing simulation.

After working in each office, the teachers divided into groups to prepare 40-day simulation programs with data provided by Sears-Roebuck. The programs are a series of one-day work flow diagrams. The high school teacher decides what skills to teach and then makes plans for the simulated office. If a teacher sees that a student needs digit work, he can design a work load for the student with many coupons and checks included.

Dr. Bruce Blackstone, program planning officer and head of Office Occupation Education, U. S. Office of Education, Washington, D. C. is observing the workshop.

The Washington Business Educator

Thirty-six high school teachers and supervisors from 34 states played the roles of cashiers, executive secretaries, vice presidents and tax clerks at Utah State University in July. They were participants in the practicum of simulated methods in Office Occupations Education, a two-week workshop financed by a grant from the USOE.

The purpose of the workshop was to acquaint office education teachers and supervisory staff with the method of simulation instruction.

A "poor man's" office was assembled to illustrate how schools which do not have much office equipment can simulate an office with only typewriters and desks. The "rich man's" offices had modern office equipment, furniture, and an intercom telephone system which allowed monitoring and recording of all calls made in the office. The class could then play back the calls and in debriefing sessions make constructive progress in simulated procedures.

Albany, Oregon Newspaper

The university press release called it a "practicum for simulated methods in office occupations education." That was what it was to the Albany business education teacher for the first two days of this workshop. Then he discovered what simulation was all about, and his enthusiasm for teaching office procedures in a "pretend" or simulated situation began to grow.

During the session, the teachers participated as students would, and their classroom was the simulated office. Such a simulated office would prepare the student to walk into an office as an employee and feel familiar with the situation.

The participant said it would be a year of planning before such a course would be possible here. It would be an eight to nine weeks' course, designed for seniors, and given at the end of a school year when students are ready to set out into the business world.

"Students will learn what it is really like to work in an office, and the intereaction of one position with another in a whole office operation."

Scotichronicon - Louisiana High School Newspaper

Every weekday morning, Lee Circle Mortgage, Inc., becomes a part of Riverdale high school. By using telephone, electric typewriters, printing calculators, and other equipment, two groups of 11 girls assemble to carry on business operations.

The company is the only office simulation class in the state of Louisiana and the latest step in clerical practice advancement. Its purpose is to give the students in school, office work experience before graduation.

Nevada Newspaper

The workshop acquainted high school office education teachers with the method of simulation instruction. Simulation is evolving into many areas of education. An office environment is one of the areas best suited to simulation because it can be easily duplicated in the classroom.

The entire design of the summer workshop was based upon actively involving the participants in a simulated office from the very first minute. The purpose of establishing this office was not to teach office practice, but to teach simulation practice. Hence, the form of the office will change four times during the two weeks and each daily four-hour simulation will be followed by a two-hour presentation and discussion concerning the purposes served by each simulation effect and the methods employed to produce it.

Since enrollment in the workshop was limited, a select group of teachers were invited to attend. Selection was based on the applications received from individual teachers, previous business experience of applicants, and leadership ability of applicants as graded by officials in their own state Department of Education. Final selection of participants was made by the project director, Garth A. Hanson, and his staff.

In addition to project director, Professor Hanson, other experienced business education and simulation experts were on hand to help direct the workshop. E. Charles Parker, specialist, business and office occupations, Utah State Board of Vocational Education served as associate director of the project.